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Original Articles.

LEPROSY IN THE HAWAIIAN ISLANDS.*

JUDSON DALAND, M.D.

Professor of Clinical Medicine at the Medico-Chirurgical College; Professor of Clinical Medicine at the Philadelphia Polyclinic; Physician to the Philadelphia Polyclinic Hospital.

PHILADELPHIA.

Leprosy has existed in all the islands of Hawaii for many years and was first officially recognized in 1840, and there is general belief that it was imparted from China. As the disease spread rapidly, a board of health was organized in December, 1850, with power to insist on segregation of all persons suffering from this affection, in consequence of which act the malady is gradually disappearing. All leprosy suspects are sent to Kalihi, a receiving hospital near Honolulu, where they are examined by a medical board and all lepers are transferred to Molokai.

Despite the earnest efforts of the board of health, an unknown number of lepers exist in the different islands of Hawaii, which number, however, is steadily decreasing, and is now smaller than at any time in the past. Many of the suspects present conditions rendering diagnosis extremely difficult. This is especially true in certain of the early cases complicated by disease of the skin, such as psoriasis, chloasma, scabies and erythema. Reliance is placed not only on the characteristic changes that are observed in the skin, mucous membrane and nerves, but special importance is attached to the discovery of the bacillus of lepra in discharges from the skin or mucous membrane and also in small portions of excised skin. The bacilli are discovered, usually with great ease, in the skin from the external auricle when this portion of the body is invaded. The recent observations of Boston[1] would suggest the advisability of more frequent and thorough examinations of the blood for the lepra bacillus in suspected cases.

Dr. Jonathan T. McDonald[2] of Honolulu summarizes the diagnostic signs of leprosy in Hawaii as follows:

1. The microscope is the supreme agent of the final diagnosis of leprosy. No patient should be committed to a segregated colony without a bacteriologic demonstration of the disease.
2. Of clinical symptoms, maculæ, chiefly leucodermic spots, are found in 89 per cent. of all cases.
3. The lepra nodule found in 74 per cent. is the one chief distinguishing lesion of skin leprosy.
4. Thinning or complete loss of eyebrows and lashes is present in 63 per cent.
5. Atrophic changes in hands and forearms with retraction and contraction of fingers and enlarged ulnar nerve in 32 per cent., a leading feature of nerve leprosy.
6. The plantar ulcer found in 26 per cent., usually on the ball of the foot.
7. Absorption of phalanges in 16 per cent. with occasional spontaneous amputation.
8. Elephantiasis of hands and feet in 16 per cent.
9. Facial paralysis in 11 per cent.
10. The entire body should be carefully tested for anesthetic areas.
11. Several of the above symptoms can be found in some slight degree at least in every leprous subject.

The Hawaiian possesses a peculiar susceptibility to leprosy. The number of whites that are afflicted are few, and, strangely enough, but few Chinese have been affected with the disease. The census at Molokai from 1866 to 1885 shows 2,997 Hawaiians, 37 mixed Hawaiians, 16 whites, 22 Chinese and 4 other nationalities. It is somewhat difficult to accurately determine the result of segregation by a study of the statistics of the past 37 years because of the great variation in the population in different years, and the extraordinary influx of Chinese and Japanese coolies; further, no accurate census existed as to the number of lepers in the islands in 1865, when segregation was first introduced, and in like manner, despite the earnest efforts of those in authority, the statistics of to-day are only approximate, as many lepers are concealed by relatives or friends so as to avoid being sent to Molokai. The number of commitments during the past ten years shows a gradual decrease. During the year 1900 the number of commitments was 85, whereas in 1891 there were[3] 132. It is the belief of those who have to do with leprosy in Hawaii that segregation has reduced the number of lepers on the island.

I desire to express my thanks to the president of the board of health at Honolulu and to Dr. L. E. Cofer of the U. S. Public Health and Marine-Hospital Service through whose kindness I was permitted to visit the leper settlement Sept. 4, 1902.

The island of Molokai is southeast of Oahu and northeast of Maui. The surface is mountainous; its length is 35 miles and its area 270 square miles. A small peninsula, projecting into the ocean from about the center of the northern coast of the island, was set aside for the lepers by King Kamehameha in 1865 and has an area of 8 square miles. The breadth at the base of the peninsula, where it joins the cliff, is 2¾ miles, at the center 2½ miles, and it measures one mile in length. It is shut off from the remainder of the island by a bold rugged mountain range, extending from the east to the west, having an altitude of from two to three thousand

* Read, with lantern slide illustrations, before the American Climatological Association at Washington.

1. "Lepra Bacilli in the Circulating Blood," Medical Bulletin, vol. XXV, 2, February, 1903.
2. "A Diagnostic Examination of 150 Cases of Leprosy," THE JOURNAL A. M. A., June 6, 1903.
3. Public Health Report, U. S. Marine-Hospital Service, Oct. 11, 1901.

feet. With the exception of a rough steep trail which is almost impassable, no land communication is possible between the leper settlement and the rest of the island. Communication with the outside world is maintained by a small steamboat, the *Lahua*, which during pleasant

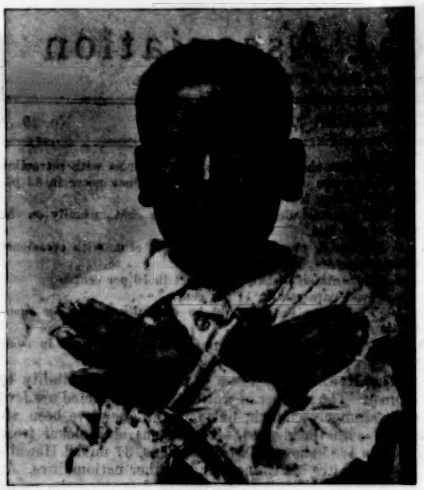

Fig. 1.—Characteristic physiognomy of leprosy.

weather calls at this port semi-weekly. In bad weather it is impossible to make a landing, so that frequently isolation is complete for several weeks. The shore is lined with large rocks, making a rather dangerous approach, and the landing of passengers and cargoes is

Fig. 2.—Leprosy in a girl aged 8 years, showing the characteristic physiognomy of leprosy.

effected by means of small boats. The soil is composed of disintegrated lava and sand, and is made to yield tropical fruits and vegetation by irrigation. An abundance of water is supplied by reservoirs fed by streams from the mountains. As the boat approaches the settlement the appearances of the villages differ in nowise from that of similar villages in other parts of the island. The combination of bright sunshine, cloudless sky, mountainous scenery in close relation with the ocean in which are numerous rocky islands of all sizes, together with luxuriant tropical vegetation and fruits, presents a scene difficult to surpass anywhere in the world.

The census of leprosy in Molokai in 1901 was 1,073. Of the 164 non-lepers, 78 were children of leprous parents, 67 helpers, i. e., those permitted to live and care for the lepers, and the remaining 19 included the superintendent, the physician, the priests, lay brothers, sisters and teachers. The total population is 1,237. Superintendent J. V. McVeigh informed me that there were 861 lepers Sept. 4, 1902, a decrease of 212, of whom about 750 were native Hawaiians. About 600 of the lepers live in Kalaupapa, which is the residence of the medical officer, Dr. W. A. Goodhue; of the superintendent; of the priest of the chapel of St. Francis; of Father Wendelin, the successor to Father Damien, who is in his sixteenth year of service, and of Mother Marieanne, who

Fig. 3.—Tubercular leprosy of the face and ear.

has been in charge of the Bishop Home for Girls with Leprosy for fifteen years and who is assisted by three sisters. At Kalawao, the original settlement, there are about 200 lepers, in which place lives Mr. Dutton, who has been in charge of the Baldwin Home for Boys for seventeen years. The chapel is in charge of Father Joseph, assisted by four lay brothers.

The unselfish labors of these men and women are of the greatest value to the lepers, and I take this opportunity of expressing my appreciation of the excellence of their work and my profound admiration for each of them individually.

It is difficult to imagine a more ideal spot for a leper settlement than that of Molokai, isolated by Nature's barriers, the mountains and the sea; situated within the tropical circle, and possessing a climate admirably suited to those suffering from this disease, and standing in strong contrast to the climatic conditions under which lepers exist in Iceland, Norway and India.

The life led by this community is similar to that of the villagers in non-leprous regions, and they possess

churches, schools, courts and jails. Three baseball teams testify to the popularity of our national game; pingpong is played with enthusiasm, and many devote themselves to fishing, rowing, hunting, horseback riding and driving. Most of the members of the community seem happy and contented, and their love of music is shown by the existence of a village band and singing societies. Although the lepers are cared for at the expense of the government, more than $17,000 was expended in the general store for additional supplies during twelve months. Many of the lepers or their relatives are in possession of moderate fortunes.

Fig. 4.—Tubercular leprosy.

The customs of the Hawaiians are such as to facilitate the spread of leprosy, as for example: The use of the family pipe, which is passed from one member to another; the carrying of food to the mouth by means of the fingers, and the general want of cleanliness. I believe that heredity plays a very unimportant rôle in the spread of the disease, as many children born of leprous parents remain free from the disease, more especially if they are removed from their parents at an early age. In 1884 there were 26 children born in the settlement, one or both of whose parents were lepers before each birth. But two developed leprosy, despite the fact that they had lived in the houses of lepers all their lives. This view is supported by Dr. Carleton, who has had 20 years of experience with leprosy in India and has seen 92 children of leprous parents, only two of whom developed leprosy. The majority of observers in Hawaii believe that leprosy is contagious, which view is supported by the observations of Arning, who inoculated Kenan, the condemned criminal, who 2½ years later showed leprous changes in the skin and in various parts of the body, and died of the disease at Molokai. Unfortunately, this experiment is vitiated by the occurence of leprosy in his mother-in-law, his son and his nephew. The historical case of Father Damien, a Belgian, who died of the disease seven years after its first

Fig. 5.—Macular leprosy.

appearance, and the occurrence of ten cases of leprosy in ten years among non-leprous individuals at the settlement demonstrates the contagiousness of this disease. At the time of this visit no example of a case of this disease contracted in the settlement existed, despite the fact that a number of individuals living in the settlement have been exposed to the disease for periods of 15, 16 and 17 years. The non-infection of a woman who was successively married to three leprous husbands tends to prove that this disease is but feebly contagious. There is a widespread belief among the physicians in Hawaii that syphilis greatly increases the susceptibility to leprosy, and this is believed to be a part of the explanation of the Hawaiian's susceptibility to the disease. The white race enjoys a remarkable immunity and when proper hygiene and good food is secured the Hawaiian's susceptibility decreases.

Fig. 6.—Macular leprosy, with palmar ulceration and absorption of the terminal phalanges.

Leprosy became widespread during the smallpox epidemic in 1852 owing to careless vaccination. It is believed that the disease may be transmitted by the secretions, by cohabitation and by insects, more especially mosquitoes and flies, and that the portal of entry of the bacillus may be the nares, the mucous membrane of which may have become accidentally abraided by the fingernail, or through the skin, which may have been injured; but, in truth, the exact method of entry and transmission of the poison is, in most cases, unknown. Recent observations show that an enormous number of bacilli are found in the nasal secretions when these parts are affected, suggesting that this is an unsuspected source of great danger. Dr. McDonald has examined the mucus from the cartilaginous portion of the nasal septum in a number of cases of leprosy, but he has rarely found the *Bacillus leprœ*. As in other leper settlements the varieties of the disease are the tubercular, anesthetic and mixed; the tubercular variety is most common. Since the establishment of this settlement, from time to time, many forms of treatment have been tried,

Fig. 7.—Leprosy, showing the characteristic plantar ulceration and changes in the fingers.

Fig. 8.—Leprosy, showing the leonine expression, loss of the eyebrows and deformed hands.

but without success. At present the patients are bathed two or three times daily in warm water, and internally

the Goto treatment is employed, the composition of which is a secret. This treatment is apparently beneficial, but is not curative. The tubercular ulcerations are treated antiseptically. There is a widespread belief, however, that the Kausatsu baths in Japan are of decided benefit. Certain cases of leprosy appear to be self-limited, and it is believed that this explains some of the cures that have been reported. The majority of observers believe that segregation prevents the spread of this disease. The following conclusions are deduced from this study of leprosy at Molokai and represent the prevailing opinion in Hawaii:

1. The *Bacillus lepræ* is the cause of this disease.
2. This disease is feebly contagious.
3. The Hawaiian is peculiarly susceptible to leprosy.
4. The Caucasian possesses a high degree of immunity.
5. Syphilis predisposes to leprosy.
6. Heredity is a factor of but little importance in the causation of this disease.
7. Segregation prevents the spread of leprosy.
8. The precise manner in which this disease is ordinarily transmitted from the sick to the well has not been proven.
9. There is no cure for leprosy.
10. Benefit may be derived from good hygiene, good food, climate, hot baths and the antiseptic treatment of ulcerative surfaces.

LEPROSY FROM A SANITARY STANDPOINT.*

ISADORE DYER, PH.B., M.D.

Professor on Diseases of the Skin, New Orleans Polyclinic; Editor, *New Orleans Medical and Surgical Journal;* Collaborator, *Lepra Bibliotheca Internationalis;* Honorary Consulting Leprologist to the Louisiana Leper Home.

NEW ORLEANS.

SOME ANCIENT METHODS.

Almost the first knowledge of leprosy carried with it methods for its control. No doubt many diseases were called lepra which did not deserve the name.

The Hebrews, Arabs, Greeks and Egyptians recognized the disease and named it. With each of these peoples treatment was made subservient, while the sanitary measures were often radical.

The Bible (*Leviticus, Numbers* and *Deuteronomy*) quite extensively refers to the lepers among the Hebrews. So true is this that the popular conception of leprosy to-day has been derived from the scriptural relation of it. "And the leper in whom the plague is, his clothes shall be rent, and his head bare, and he shall put a covering upon his upper lip and shall cry 'Unclean, Unclean.' All the days wherein the plague shall be in him, he shall be defiled; he is unclean. He shall dwell alone; without the camp shall his habitation be." (*Leviticus* xiii: 44.)

We read in the same chapter (verse 52) instructions to the priests, "He shall therefore burn that garment, whether warp or woof, in woollen or linen or anything of skin wherein the plague is, for it is a fretting leprosy; it shall be burned in the fire."

"And he shall cause the house to be scraped within round about (chap. xiv: 41-45), and they shall pour out the dust that they scrape off without the city into an unclean place." Clean stones are then ordered and fresh plaster, and if still the disease lurks, "Now he shall break down the house, the stones of it and the timber thereof, and all the mortar of the house; and he shall carry them forth out of the city into an unclean place.

The children of Israel are commanded to cast every leper out of the camp. (*Numbers*, v. 2.) Here and there we find in the Bible archaic methods of cleansing those who may be afflicted, but these are religious rites rather than practical ones, dealing with exhortations, sprinkling with water made sacrificial with the blood of birds or of the proverbial lamb.

The Koran likewise regulates the life of the leper.

These facts are related here with the idea of calling attention to the fact that the problems of sanitary measures in leprosy are not new; that even among primitive people the character of the disease was such as to create a popular fear of it which demanded remedies of prevention.

Historians of leprosy have traced the disease from Syria into Persia, Hindoostan, China, Japan, Australia, New Zealand, Africa, Turkey, Greece, France, Spain, Britain, Germany, Russia, Scandinavia and the Americas.

We find it rising and declining at different periods in different parts of the world, moving gradually from the East to the West and from the South to the North.

Probably limited in the early period of the world to the Orient and to Egypt—

> "High up the Nile mid Egypt's central plane,
> Springs the dread Leprosy and there alone."
> —*Lucretius de Natura Rerum.*[1]

The disease spread rapidly through the south of Europe from the second to the seventh century, reaching its acme from the eleventh to the twelfth.

The earliest record of leprosy in Great Britain is found in the year 950; in 1585, by act of Elizabeth, the leper hospital at Sherburn, in Durham, was assigned to other use; during the reign of Edward VI, 1547-1553, most of the lazarettos were empty.

In Scotland the disease was still traceable in the seventeenth century, a leprous woman being condemned in Aberdeen; in 1652, the Lazar House at Greenside, in Edinburgh, was dismantled; in 1742, a public thanksgiving was held in the Shetland Islands to celebrate the disappearance of the disease; in 1798, a native of the Shetlands was confined in Edinburgh.

No particular or extraordinary care was displayed with these victims of an unfortunate disease. From the twelfth to the eighteenth century, each of the countries of Europe was afflicted, France notably having placed on record as many as 15,000 in leprosariums, some traces of which remain to-day in Brittany.

SOME METHODS PRACTICED TO-DAY.

In every country in which leprosy has been found certain methods have obtained for their relief or for the protection of the community. In comparatively recent years the attention of the public has been attracted through the conditions in India, Norway and the Sandwich Islands, in each of which countries systematic methods have been followed and direct results obtained.

As with every revolution of ideas, the natural recognition of the fact that leprosy was increasing through the world created an investigation of the fact. First of all, the extensive report of the British Leprosy Commission in India caused a public apprehension because of the knowledge related that there were some 200,000 victims of the disease in that country.

The Berlin Leprosy Conference, in 1897, followed as a natural consequence, and the results of that meet-

* Read at the Fifty-fourth Annual Session of the American Medical Association, in the Section on Hygiene and Sanitary Science, and approved for publication by the Executive Committee: Drs. S. Fulton, Seneca Egbert and H. M. Bracken.

1. Wilson's Text-Book on Diseases of the Skin, 1868.

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ing, summed up by a resolution recognizing the disease as contagious, pointing to its undoubted spread and urging the action of governments in the matter, all created an interest which up to the present day is steadily growing. Now, most every government is in line and methods of isolation and prophylaxis have been evolved; Russia has several colonies; France and Germany, Spain and Italy, Greece and Turkey, have all acted on the resolutions of the conference. Japan had already established leprosariums and accounted for 20,000 lepers. The Sandwich Islands have the island of Molokai, and have reduced their lepers to a few hundred in number. Norway, by a radical method of isolation and supervision, has practically eradicated the disease and ameliorated its types. In the Americas, the only hospitals of long standing are those at Tracadie, in New Brunswick, and in Havana. In the former there are about twenty inmates, with only a rare and occasional addition. Havana has 114, most of them among Spaniards, natives and Chinese and almost all of the effete nerve type of the disease. The hospital is excellently managed.

The history of the Louisiana home and of the disease in this state has already been written. Here the types are of the acute forms, undoubtedly endemic and active in character.

The accretion of inhabitants from the Philippines, the increasing intercourse with the western countries, urge a better knowledge of the disease and an appreciation of methods. The United States government has already established points for the isolation of lepers in the Philippines and on the island of Guam.

THE COMMUNICABILITY OF LEPROSY.

Notwithstanding the fact that the lepra bacillus is found in all cases of leprosy in which there are evident lesions of the disease, that the bacillus is frequently in the nasal secretions, that it has been found in the earth from the graves of lepers, that it has been found in the rooms where lepers lived, that it has been found on utensils used by them, there are those who contend that the disease is not contagious. Their argument is based on the fact that Koch's law is not fulfilled, i. e., that the disease is not propagated in animals nor in other subjects, who, inoculated in turn, transfer it to others. I believe we can dismiss these antagonists because of their purely technical position in the face of other circumstantial and positive evidences. To wit: Leprosy spreads in any community in which it is introduced; it spares neither old nor young; it may be selective of race, but it occurs almost directly in close community life; it occurs in families, and has not been proven hereditary; it frequently attacks the children before the parents; there is almost always a history of exposure either direct or indirect and, if sought for, communication of the disease from person to person may be traced.

The shortness of this paper prevents the detailed relation of cases, but enough have been recorded elsewhere to bear out the argument.

Opinion to-day classifies the degree of contagiousness in leprosy. Formerly it was believed that contact with the unbroken skin of a leper would produce the disease. Popular fear created the impression that looking at a leper, being in his presence, was sufficient; to-day, the consensus of opinion carries the belief that the nasal and buccal secretions, together with those of the generative apparatus, are the most frequent sources of the spread of the disease. This is borne out by the fact that the tubercular types of leprosy nearly always show the first signs on the exposed parts of the body, face and hands, and that early in the disease the nasopharynx presents tubercles.

As a protagonist for the non-contagiousness of the nerve type of the disease, Dr. Ashburton Thompson suggests that these cases present no lesion in which the bacillus may be found, and that they are rather the types of the effects of the bacillus than of an acute disease. He has repeatedly examined the macules and nerve sheaths, together with the nasal passages, with negative results so far as the bacilli are concerned. Dr. Thompson has many followers. The writer is in line up to a certain point, but experience has shown that in these cases, when neglected, the course is the same as with other types of the disease.

Within the last five years no less than six cases of nerve leprosy have been treated in the clinic for nervous diseases at Charity Hospital, in New Orleans, as syringomyelia, subsequently being referred to me when eruptions appeared. Of these cases, three presented tubercle lesions, the others being seen in time to prevent the granulation changes.

METHODS OF PROPHYLAXIS FOR INDIVIDUAL AND COMMUNITY PROTECTION.

The writer is comparatively a young man, and in his relation to the disease of leprosy his experience has been just a decade. In that time, however, the opportunity has been afforded of the observation of the disease among all classes of people: The beggar, the indigent and careless negro, the workman crippled by the disease, the butcher, the baker, the cook, the clerk, the tradesman, the merchant, the housewife and the well-to-do.

Within these ten years have been noted instances of the disease spreading from father to child, from daughter to mother, from sister to sister, and many others occurring with no evident family relation accounting for the disease.

The evidence has been sufficient to thoroughly impress the fact that the disease does spread and that it occurs in individuals in Louisiana who have either lived in affected communities for periods of not less than ten years or else they were born, reared and have always lived in the state.

Cases have been noted which have lived in comparative intimacy in the family life with no evidence of the spread of the disease—as yet.

The subject of prevention in leprosy has been thoroughly discussed both from the standpoint of the individual and from that of the public, and whatever opinion the writer may have must, of course, repeat in large measure the views of those who have gone before. This may be stated briefly under two heads:

The Individual.—Either the victim of leprosy should be segregated with those of like condition or else, if he lives in his own family, he should be given a separate room; should have his meals alone; should wash his own utensils and should have his laundry boiled separately. I believe that this is difficult, because, even when the family are aware of the disease, they become careless in the family relations.

The Public.—The public care of lepers provides: (a) segregation under systematic methods which should consider (1) the segregation of the sexes; (2) some arrangement by which the trophic or nerve type should be entirely separate from the tubercle type or skin leprosy, because it is my belief that there is no reason why a leper with nerve leprosy should not acquire fresh lesions from

infection by a new contagium carrying the leper bacilli, found so freely in the tubercle type. Heretofore leprosy has been held as incurable and the simple diagnosis of leprosy has been sufficient to condemn a victim, irrespective of the type and he is doubly condemned if he is exposed to fresh infection while he is trying to get well. (b) Particular methods of sanitation should obtain. No institution pretending to care for lepers should be without the fullest equipment for bathing facilities, both medical and plain. Water in leprosy is as potent in its prophylaxis as it is for remedial use.

One word in conclusion. Educate the profession and the public regarding the disease. Let them know what leprosy is, not a colored impressionist's picture, but the truth of its physical and moral characters.

Unfavored of God's kind,
And set apart, a curse;
A living death for men to pity,
As they shudder at the worse
Than sin, or pain, or shame
Of *It;* for can a name
Be borne by one of these?

Not spotted white, nor snowy clean,
As Bible tales remark it;
But, bursting through a boiling skin
Of lumps and bumps, a thickened mass
Of bronzed and blackened human kin,
With here and there a spot of brown
Or lighter hue, while over all a tint of red
By Nature's thrown, as if to hide the frown
Which masks the soul of those
Who bear the burden of the blight.

Nor king nor serf the scourge hath spared,
And as the ages into sons run,
These sightless, voiceless human parodies
Will breathe the tones of the Unblest;
Accursed by all, marked by Fate,
As victims of the great Unrest,
The Morbid in the True, too late
To save their souls for better things.
And so the fell decree makes members
One by one to fall, until at last
The end finds semblance only of a past.
A trace alone of kinship to the race
Which bore it, in this, a mass
Of tissues, human once, but now
Distorted, framed and bound in shapes
Fantastic in their frightful symmetry,
And shorn of everything but form.

124 Baronne Street.

DISCUSSION.

Dr. G. T. Swarts, Providence, R. I.—The subject of leprosy is a matter that does not come very prominently before our health boards, and yet our experience in Rhode Island leads me to believe that it would be well for all our state health officers to familiarize themselves with the customs in vogue in the states where lepers are found in respect to isolation of the patient. In our principal hospital in Providence there appeared a case of what we called skin disease, ulcers on the foot and a mottled appearance of the skin. There being anesthesia in the lower limbs and the arms we thought that our neurologist should have the case in his department. However, the interne, becoming suspicious at the mottled skin, and thinking possibly it might be a case of leprosy, referred to the books and discovered that anesthesia is a common condition of leprosy, and considering the ulcers at the base of the big toe, he jumped at the conclusion that it was leprosy. To make sure about it he obtained the nasal secretions and there found the bacilli of leprosy. That, of course, made the diagnosis complete. That man had been living in the city for five years without our suspecting that he was a leper. He had abnormal thickening of the face, but you could find the same condition in any sailor on our coast. The question with us was what to do with the man. Should we isolate him as we do in smallpox cases, or should we give him the freedom of the city? We wrote to Dr. Dyer and others familiar with the subject, and obtained valuable advice. In the meantime, unfortunately, the man, finding out what the disease was, asked for his clothes and disappeared. We have not been able to trace his whereabouts since. Had he remained with us we would have been worried to know what to do with him. We, of course, wanted to protect ourselves, and yet not impose on the individual. That is the reason this paper was requested of Dr. Dyer, so as to put the various health officers in position to know what to do in cases of this kind. You know that the public, immediately on hearing of a case of leprosy, imagine there is a scourge of the disease, and demand extreme precaution from the health officers for it.

Dr. W. H. Sanders, Montgomery, Ala.—Could you trace the infection?

Dr. Swarts—He had resided in South America for twelve years before he came to us. He had lived for years with his wife, who was not affected, so far as we know. She has since died, of some other disease. A daughter, aged about 12 years, did not seem to be affected. Therefore, the question arises as to whether there is any danger of infection. The nasal secretions were found to be saturated with these organisms, which, it seems to me, could have been communicated to any susceptible soil.

Dr. H. M. Bracken, Minneapolis—The conditions in Louisiana and those in Minnesota are supposed to be quite different. As I understand it, all, or nearly all, of the lepers in Louisiana are American born or residents of the United States for some time. Is not that so?

Dr. Dyer, New Orleans—The list of cases which I submitted to the Berlin Leprosy Conference have either lived in Louisiana for at least ten years or were born here; and the same statement is true of all cases coming to my knowledge since I made up that list. I never saw a Chinese leper in my life, and only one Scandinavian; he was sent back by the same ship on which he came.

Dr. Bracken—There were some Norwegians who came to our state with the idea that change of climate would give them an opportunity to recover. There were a considerable number of lepers in Minnesota fifteen or twenty years ago, but only a few now, and the position was taken that in Minnesota there is no danger of the disease being transmitted. There was no record of any American-born leper in Minnesota until within the past two years. I know of three now, but they are all of Scandinavian parentage. Two of them were brothers. There were no lepers in the family, and it is thought that the first brother became infected from a nurse girl. The third case I have in mind is the son of a leper. Under the conditions prevailing in Minnesota we have thought it only necessary to give the family advice as to how to care for the leper, in the shape of food, clothing, etc., without separating the subject from his family entirely. So far as I know, there has been no spread of the infection, except in the cases mentioned above. Minnesota is watching to see what the nation will do, because we feel that the disease can be better dealt with by the federal government than by the state. Of course, lepers who are poor are taken care of by the counties and are isolated.

Dr. Sanders—How many lepers are there in Minnesota?

Dr. Bracken—I know of thirteen or fourteen. They keep dying off and new ones coming up. So far as I know there were never more than twenty-eight or thirty in the state at one time. When I became secretary of the State Board of Health there were twenty-two, but some of these have died. Wisconsin used to have some lepers, but the state is getting older now, and they only have two or three. Iowa also has a few. There are also some isolated cases in North Dakota.

Dr. J. M. Lindsay, Havana, Cuba—Do you know the history of the American soldier that got the disease in the Philippines?

Dr. Bracken—I do not.

Dr. T. T. French, Honolulu—The history of leprosy in Hawaii is interesting from a sanitary standpoint. The popu-

lation there has always been small and compact. There are no densely settled places, nor are there any sparsely settled ones. The country is so remote that commerce and intercourse with other countries have been very much restricted. There are a large number of Americans living in close proximity to the natives, and the country has a larger proportion of physicians than such small countries usually have—and a good many very able ones, too. Fifty years ago there were no lepers there. Thirty years ago one in each thirty Hawaiians was a leper. There is no absolute record with regard to the first case among them, but there were a number of Chinese imported, and they undoubtedly brought the disease. There was no word in the native language for leprosy until the disease appeared, and it is now called "mai pake," meaning "Chinese sickness." There is some dispute as to the time and place when that name was first given to it, but it is universally used by the natives, and I judge that the disease comes by the name honestly, because, as I say, a lot of Chinese were imported to work on the sugar plantations, and, of course, they brought the leprosy with them. About thirty-five years ago, fifteen years after these Chinese came with their disease, lepers were isolated on the island of Molokai, and a colony established there. We noticed that the disease kept on spreading after the establishment of that colony, until it reached its maximum, about thirty years ago. Since that time it is claimed that the disease has diminished, but my opinion is that it has probably remained about the same, because the population has been reduced, and while there are about 800 lepers in this colony, there are about 400 at large, making an aggregate of 1,200. Therefore, the effect of segregation has evidently been to check any spread. The reason for not isolating cases in the early stage was simply for fear that a correct diagnosis had not been made. When cases were sent to the board of health for examination they were not willing to segregate them, so they were pronounced leper suspects, and sent back to their districts to be kept under surveillance and make periodical reports to the local officers. In that way they were allowed to linger in the district a long time, and conditions got worse. I think that is the way the disease has been allowed to keep on and smolder as it has.

DR. ISADORE DYER—Referring to the point made by Dr. Swarts, I had a case of a girl who had been treated by Dr. Blanc some seven years previous to her calling on me. She bore no evidence of leprosy beyond a true trophic ulcer on the ball of the big toe. I did not examine it bacteriologically. The father of the girl was a typical tubercular leper and a recent case. It was a matter of history that the girl had been infected at least seven years before she came to me. The father was an Irishman who had lived here for years, and the girl was about 22 years old when I saw her.

DR. T. T. FRENCH—As to leprosy being hereditary, there is a home in Honolulu for the non-leprous children of lepers. The parents often object to their children being taken away, but there is generally an average of twenty or twenty-five girls kept there until they are 18 or 20 years of age. Only one case of leprosy has ever developed there, though we have many children of two leprous parents. After they leave the home you can not tell anything about them, but when you consider that they stay there until they are about 20 it seems to me that is a pretty strong argument against leprosy being hereditary.

Hemostatic Action of Ovarian Extract.—The tendency to hemophilia seems to belong exclusively to the male sex. It may be transmitted from grandfather to grandson, remaining latent in the mother. This fact and the frequent observation of severe epistaxis in young girls approaching puberty, when the ovarian functions are not yet fully established, suggested to Dr. S. Zavadier of Fouriesburg, southern Africa, that the ovary might possibly be the organ that inhibits the tendency to hemophilia and thus renders women exempt although able to transmit the tendency to their offspring. In a recent severe case of hemophilia, rebellious to all other known measures, he finally administered ovarian extract and with the most encouraging results. The *Semaine Médicale* mentions in quoting his communication that Dr. E. Fuller of New York recently proposed thyroid treatment for the same purpose.

FIXATION OF THE PROLAPSED KIDNEY.*

AUGUSTIN H. GOELET, M.D.
Professor of Gynecology in the New York School of Clinical Medicine; Gynecologic Surgeon to the Metropolitan Hospital.
NEW YORK.

That so many modifications of this operation have been made since it was originally attempted by Hahn in 1881 is the best evidence of the necessity of correcting prolapse of the kidney by permanent fixation, despite the opposition to operative interference in some quarters by those who favor belts and corsets. It suggests also the possible inefficiency of many of these procedures. Almost every well-known surgeon has some special technic of his own, but few of them have many followers. It is my purpose in submitting here a technic of my own, which I have employed now for nearly three years and

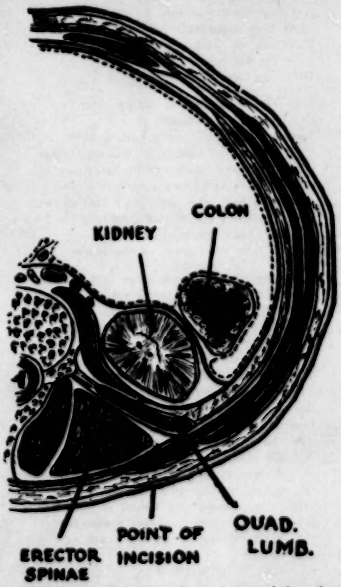

Fig. 1.—Showing the relation and attachment of the colon to the kidney, and the relative location of the muscles encountered in reaching the kidney through the vertical lumbar incision.

have found uniformly successful, to point out some of the causes of failure with this operation and show how it may be made successful and satisfactory.

The inadequacy of belts or corsets or any other form of external support when the kidney has descended below the border of the last rib in front so its upper pole may be palpated, is more readily appreciated if we consider what such support does. It is only a substitute for relaxed abdominal walls and the pendant abdominal organs, but in only a small proportion of these cases is the abdominal wall relaxed. The kidney is normally a movable organ, its normal range of mobility downward being from an inch to an inch and a half on deep in-

* Read at the Fifty-fourth Annual Session of the American Medical Association, in the Section on Obstetrics and Diseases of Women, and approved for publication by the Executive Committee: Drs. A. Palmer Dudley, H. P. Newman and J. H. Carstens.

spiration, and it is restrained from further descent only by its surrounding fat and the vessels entering the hilum. To some slight degree additional support is afforded at times by the intestines—the colon in particular, to which it is attached on its anterior surface. This attachment of the colon, however, is one of the chief reasons for its displacement, for when the colon becomes distended it drags on the kidney and the traction is invariably downward when the waist is constricted by corsets or clothing, the distended bowel, as is well known, being crowded below the waist line.

Belts and corsets are not, however, entirely without value, and are useful in the earlier stages of mobility before the kidney has descended below the rib in front, to prevent or retard further descent, and also after operation to support the abdominal organs when necessary and give the patient a feeling of greater security. I believe, however, they are of little or no value in preventing recurrence of the prolapse when the operation for securing fixation of the organ has been properly done. On the other hand, belts and corsets, beside being inadequate, are positively injurious when adjusted to support the kidney after it has descended below the border of the rib because of the irritation to the kidney from the pressure exerted on it. My views on this point correspond with those of Henry Morris of London, who has also had abundant opportunity for careful observation.

The disadvantage, then, of belts or corsets adjusted to support the kidney when it is prolapsed below the ribs in front, is that the pressure necessary to afford effective support will certainly provoke undesirable irritation and eventually lead to serious inflammation in or about the kidney.

INDICATIONS FOR OPERATION.

Prolapse of the kidney to the third degree or beyond, that is, when it has descended below the border of the last rib in front and its upper pole can be palpated when the patient is in the erect position, may be considered sufficient indication for operation because:

1. Prolapse of the organ to that degree permits abnormal mobility and is not conducive to health or comfort though it may not produce intolerable symptoms at first.

2. The position of the kidney when the patient is in a sitting or the erect position interferes with the draining off of the excreted urine, either because of flexure of the ureter or compression of the ureter by the kidney which overlaps it and presses backward on it when the abdomen is constricted by the corsets or clothing.

3. Its circulation and function are seriously impaired by the displacement, and inflammation of its structure frequently results.

4. The kidney when prolapsed to this extent overlaps the ovarian vein as it ascends along the spine, compressing it and retarding the return circulation from the pelvis, thus being a frequent cause of pelvic disease.

If the opposite kidney is sufficiently movable to descend on deep inspiration so that half of the organ can be palpated, it should be fixed at the same time as its fellow to avoid the necessity of subjecting the patient to a second operation, which would be inevitable, because when the kidney is movable to that degree the mobility invariably increases, the degree of descent being progressive. I have several times been obliged to repeat the operation on the left kidney a year or two after fixing the right when either the patient or her physician has opposed a double operation or when the degree of descent of the left kidney at the time of the first operation was not considered by me sufficient to warrant operation.

Nephropexy is justifiable in hysterical and neurasthenic patients because it is an anomalous condition that should not exist; it is a constant source of irritation; it impairs the health of the patient and may operate as a cause of these nervous disorders by acting as an internal traumatism.[1]

PREPARATION OF THE PATIENT FOR OPERATION.

In addition to the usual preparation of the field of operation to secure asepsis, there is some general preparation of the patient that is essential for success. It is useless to delay operation in an attempt to build up a patient whose health is impaired in consequence of this condition, but very much can be accomplished that will be of material aid at the time of operation and during convalescence by correcting digestive disturbances beforehand and securing normal functional activity of the liver, and it is well worth the delay required.

It is very necessary to avoid excessive vomiting following anesthesia because of the strain it puts on the freshly attached kidney, and this can only be obviated by relieving the digestive disturbances beforehand by careful dieting and medication and restoring normal activity of the liver. At least a week should be consumed with such preparation and in cases of long standing from two to three weeks' preparation will insure a smoother convalescence.

Fig. 2.—Showing position of the patient on the table, ready for operation, with the air pillow in position under the abdomen.

OBJECTS TO BE OBTAINED IN NEPHROPEXY.

1. Permanent fixation of the kidney in its normal position.

2. Complete separation of the kidney from its attachment to the colon and duodenum in front to obviate subsequent dragging on it.

3. Avoidance of injury or mutilation of the kidney.

4. Avoidance of mutilation of the patient by a disfiguring scar or injury of the structures penetrated in gaining access to the kidney.

5. Cure of the symptoms or conditions caused by the prolapse.

TECHNIC OF THE OPERATION.

The patient when anesthetized is turned over on the abdomen and a roll or air-pillow eight inches in diameter is placed under the abdomen which flexes the spine, increases the costo-iliac space and forces the kidney up into position. A vertical incision is made through the skin and fat down to the first layer of muscles beginning just below the last rib and extending downward along the outer border of the erector spinæ muscle for about three and a half inches. This will be about three to four fingers' breadth from the spine according to the

1. Albarran, quoted by Henry Morris.

width of the back. The sheath of the erector spinæ should not be opened, but the fibers of the latissimus dorsi are drawn aside with blunt hooks and the lumbar aponeurosis is divided with scissors to the limit of the wound above and below, exposing the quadratus lumborum muscle beneath. Bleeding points should be caught with hemostatic forceps and tied before proceeding.

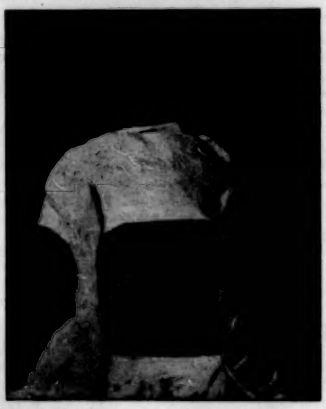

Fig. 3.—Showing location of the vertical lumbar incision on both sides.

Broad retractors are now inserted and the quadratus lumborum muscle is drawn to one side toward the spine, exposing beneath the transversalis fascia. This fascia is divided with scissors to the extent of the wound above and below, exposing the fatty capsule immediately beneath it. In dividing this fascia it is important to avoid the iliohypogastric nerve, which crosses obliquely in

Fig. 4.—Author's blunt hooks (reduced in size) employed for separating muscles in the direction of their fibers in gaining access to the kidney after incision through the integument and fat.

front of the quadratus lumborum muscle and to include it in the retractor on the spinal side of the incision.

The kidney is now located by inserting the finger and sweeping it around over the surface of its fatty investment. The fatty capsule is then opened with scissors well up toward the upper angle of the incision and well over toward the spine to avoid opening into the peri-

Fig. 5.—Author's broad universal retractors (reduced in size).

toneal cavity or wounding the intestine which bulges up at the lower angle of the wound, and the incision is extended in a vertical direction downward on the finger as a guide. The margin of the fatty capsule on each side is seized with T forceps and traction is made on them to bring the kidney up into the wound and the work of detaching the fatty capsule from the kidney is begun. In adjusting the T forceps to the outer margin of the fatty capsule care must be taken not to include the intestine or peritoneum.

If the peritoneum is inadvertently opened in exposing the kidney no harm will result if it is immediately closed by a running suture of fine catgut. The incision then to expose the kidney is to be made further over toward the spine. This accident should not occur if the kidney is in position and is properly located before the incision into the capsule is made.

In detaching the fatty capsule from the kidney the finger should be used, aided by blunt scissors where particularly resisting bands of adhesion are encountered. The lower pole of the kidney is to be freed first, then traction on the detached fatty capsule will bring it up into the wound. If the kidney can not be delivered through the incision by traction on the capsule the patient is rolled downward on the air-pillow under the abdomen, which brings its pressure more directly on the border of the ribs and forces the kidney up into the wound.

Traction now downward on the kidney grasped with a gauze pad held between the fingers and traction on the fatty capsule at the same time will succeed in delivering the kidney through the incision on the surface of the back.

The fatty capsule is then completely detached from the kidney around both poles and on each side back to

Fig. 6.—Author's kidney needle (actual size) for inserting the sustaining sutures under the fibrous capsule.

the hilum. Complete detachment of the colon and duodenum in front is thus secured, and behind the kidney is left bare of its fatty investment for subsequent adhesion to the solid structures of the back.

It is not always necessary to deliver the kidney through the incision in order to detach the fatty capsule and insert the sustaining sutures, and it consumes more time. When, therefore, complete detachment can be accomplished without doing so this part of the technic may be omitted.

The pelvis and ureter are now carefully explored with the finger for stone, which should be removed if found before proceeding with the operation.

The fibrous capsule is not detached from the kidney nor is its surface scarified. Firm adhesion of the kidney with its fibrous capsule intact can be secured invariably if the kidney is held immovably in contact with the opposing structures for a sufficient length of time. To accomplish this, however, the suture material employed should be one that does not stretch or become absorbed, and it must be inserted and tied so that the suture loop does not become loosened by cutting into the tissues. We have in silkworm gut a material that will meet these requirements, and to render it pliable it is boiled and preserved in a 3 per cent. solution of lysol. My record of 159 nephropexies by this method without a failure to secure permanent fixation shows conclusively that stripping off the fibrous capsule or further mutilation of the kidney as by sutures which transfix the parenchyma is quite unnecessary.

The sustaining sutures, two in number, are inserted on the posterior aspect of the free border of the kidney. One, the lower, is inserted at about the junction of the middle and lower thirds of the organ and the other at about its center or midway between the poles. The

suture is threaded into small, full-curved needles one inch long, and is bent sharply at the eye of the needle and twisted tightly to avoid tearing the capsule as it is drawn through.

The needle is inserted first from above downward in a direction somewhat obliquely inward to the long axis of the kidney, and penetrates only beneath the fibrous capsule for about half an inch in length and the suture is drawn through; then it is inserted transversely a little below the point of exit of the first insertion, penetrates beneath the fibrous capsule only for a distance of about half an inch and the suture is drawn through, and then again inserted obliquely from below upward at a point opposite the first insertion about an inch from it and the suture is carefully drawn through. The needle is removed and the two ends are clasped temporarily with a hemostatic forceps. The second suture is inserted in a similar manner just above the first. (See Fig. 7.)

Inserted in this manner the suture will resist very considerable strain on it without cutting out—very many

Fig. 7.—Author's sutures for fixing the kidney. Showing their location and method of insertion under the fibrous capsule, which is left intact.

times more strain than the transverse suture, which penetrates the parenchyma, or any suture inserted through the detached fibrous capsule, and it does not mutilate. The stability of this suture seems to be due partly to the exposed portion of the loop left on the outer surface of the capsule and partly to the direction of the traction which is borne mainly by the transverse insertion of the loop and which is in a direction parallel to the capsule or surface of the kidney and not at right angle to it, as is the case with all other sutures employed for fixing the kidney.

Before returning the kidney into its normal position the redundant fatty capsule behind is trimmed off with scissors or torn off, and that in front also, but here care is necessary to avoid encroaching on the peritoneum or bowel. The fat about the lower pole is not removed.

If the kidney has been delivered through the incision it is now replaced and the ends of the sutures are carried through all the structures of the back and brought out on the surface at the upper angle of the incision—a long, curved perineal needle with eye near the point being utilized for this purpose. The sutures are tied over a fold of several layers of gauze placed lengthwise to the incision. This prevents the suture from cutting through the skin and loosening of the loop. When tied these sutures bring the kidney up into its normal position with its upper pole under the ribs.

A gauze drain is now packed around and under the lower pole of the kidney, forcing back the fat that has not been removed and the bowel which bulges up below the kidney, and the end is brought out at the lower angle of the wound.

The wound is closed by uniting the divided superficial fascia with a running catgut suture and the skin with the subcuticular suture. A bountiful supply of loose aseptic gauze is applied next the wound and over this is placed a thick pad of absorbent cotton covered with gauze, and this is held in place by adhesive strips and a binder encircling the body.

AFTER-CARE OF THE WOUND AND OF THE PATIENT.

Twenty-four hours after the operation the dressing which will be found soaked with drainage from the wound should be removed and renewed, but the wound is

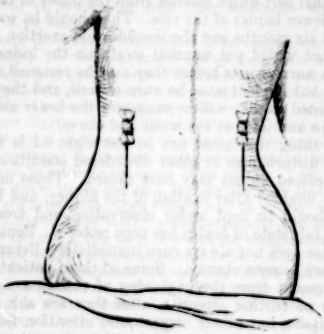

Fig. 8.—Showing position of the gauze pads at the upper angle of the incision, with the sustaining sutures tied over them.

not otherwise disturbed. At the end of forty-eight hours the gauze drain is removed and the dressing renewed. After this the dressing is removed whenever necessary.

The sustaining sutures are not removed until the twentieth day, the day before the patient gets out of bed. The exposed portion of the loop of each suture on one side of the gauze cushion is cut with sterile scissors and the suture pulls out readily, adhering to the gauze when it is lifted off. A simple dressing of gauze is applied afterward.

When renewing the dressings the patient should be turned on the side operated on, and if both kidneys have been fixed at the same time she should be turned on the side that the displacement was greatest.

During the first twenty-four or forty-eight hours the patient will complain of considerable pain in the back and the temperature may rise to 101 or 102 degrees, but both pain and temperature will subside when the drain is removed. An eighth of a grain of morphin may be given hypodermically during the first twelve hours if the pain is sufficiently severe to require it, but it should be avoided when possible. In those cases where drain-

age has not been employed the pain has been quite as severe, so it does not seem to be due altogether to the presence of the gauze, but rather to the manipulation of the structures of the back at the time of the operation.

Vomiting should be avoided if possible, and for this purpose nothing acts so well as oxalate of cerium, in doses of from seven to ten grains, repeated in three to four hours. The stomach should be kept empty for the first twenty-four hours, nothing being given during this time but hot water in small quantity at a time. If thirst is annoying, an enema of normal saline solution should be given. The bowels should be moved on the second day after operation and every day thereafter. Careful dieting will be necessary in some of these cases to keep in abeyance digestive disturbances which may continue after operation, and functional activity of the liver should be preserved throughout convalescence.

During the period of confinement to bed, which is three weeks, the patient should be kept strictly on her back if both kidneys have been operated on. But if only one has been fixed she may turn on the side of the affected kidney. The reason for this is obvious, as it prevents the kidney from dragging on the sutures.

When the patient gets up she should wear an elastic abdominal belt which reaches from the pubes to the level of the lower border of the ribs. This should be worn for at least six months and she should avoid exertion of any kind that would put unusual strain on the kidney. If she has worn corsets before they may be resumed after a month, but the belt must be worn as well, and they must be adjusted so they will be snug over the lower abdomen and hips and loose at the waist and above.

One thing that must not be lost sight of is the digestive disturbances or other disordered conditions that the displaced kidney may have caused. These may not subside unaided after fixation of the kidney, and the patient should be kept under observation and treatment until a fair state of health has been restored. Removal of the cause does not always cure immediately disturbances that have become chronic. Some of these patients show improvement from the beginning of convalescence and require no further attention after they are able to get about again, but others may require attention for some time after.

THE CAUSES OF FAILURE AFTER NEPHROPEXY.

There are many reasons why this operation may prove either a failure or may fail to afford anticipated relief, and to make them more comprehensive they are arranged as follows under separate heads, viz.:

1. Delay in operating until the kidney has become seriously disabled or an incurable nephritis has developed.

2. Delay in operating until the health of the patient and digestive apparatus are seriously impaired or incurable.

3. Unusual and irreparable ptosis of the abdominal organs as a complication of nephroptosis. In these cases, however, since the kidney is many times the most important element of the enteroptosis, fixation of this organ and support of the others by belt places the patient in a comparatively comfortable condition.

4. Failure to prepare the patient properly for the operation.

5. Failure to detach completely the fatty capsule from the kidney—that on the posterior surface to permit the kidney to come into contact with the structures to which it must become adherent, and that on the anterior surface so as to separate the attachment of the colon and duodenum on the right side and colon and pancreas on the left. Unless this detachment of the bowel from the kidney is complete there will still be dragging on the kidney, which, if it does not pull the kidney away from its attachment, will give rise to annoying pain and other symptoms.

6. Improper insertion of the sustaining sutures whereby they either tear out completely or cut through the fibrous capsule and permit mobility of the kidney before it can become permanently attached.

7. Failure to immobilize the kidney until it can become permanently attached by adhesive inflammation, either by improper tying of the sutures or the use of suture material that stretches when it becomes softened after being buried in the deep tissues of the back or absorbs too quickly, or by fastening the retention sutures to the soft structure only which yields to the constriction of the suture allowing the loop to loosen.

8. Too early removal of the retention sutures.

9. If the remaining fatty capsule is permitted to become interposed between the kidney and the structure to which it should adhere, which may occur either at the time the wound is closed or shortly after, the stability of the attached kidney is greatly lessened. This may be obviated by employing a gauze drain packed around and under the lower pole. An additional advantage of this gauze drain is that it lessens the strain on the retention sutures and prevents the accumulation of blood and serum about the kidney after the operation.

10. Delaying the removal of the gauze drain too long after operation, which would permit accumulation of the discharge back of the gauze.

11. Excessive vomiting or coughing shortly after operation may loosen the kidney from its fresh attachment.

12. Permitting the patient to turn on the opposite side too soon after operation may cause detachment.

13. Permitting the patient to assume the erect position too soon after operation.

14. Neglect to adjust proper support for lax abdominal walls after operation when the patient gets out of bed.

15. Too early resumption of the corsets or their improper adjustment.

16. Permitting too early such exertions as would put unusual strain on the kidney.

17. Attachment of the kidney too low down in an abnormal position whereby it would be constricted and irritated by the pressure of the clothing at the waist or by the corsets.

18. Neglect to correct by remedial measures after operation derangement of the digestive apparatus and other conditions caused by the prolapse.

RESULTS.

When the kidney is properly and permanently fixed in its normal position and the conditions caused by the displacement have been corrected, the result of the operation will be satisfactory. We must not, however, lose sight of the many possible contingencies that may interfere with a final successful issue and lay undue stress on the correction of the displacement alone.

Objection to the operation on the score of its mortality does not hold, for I have done 159 nephropexies on 126 patients, in 33 of these fixing both kidneys at the same time, without a death and without a failure to secure permanent fixation. Cure has resulted in all cases that I have been able to trace in from two to twelve months after operation. In one case only was the operation followed by an unpleasant complication—iodoform pois-

oning resulting from the use of 10 per cent. gauze freshly prepared with ether and alcohol. The patient, however, made a good recovery and was out of bed at the usual time.

It has been objected that the risk of an operation is not warranted in these cases when the symptoms may be relieved by a properly adjusted belt or corset. Estimated from the above report the operation has no mortality, hence there is no risk entailed, and temporary relief of symptoms does not mean a cure. Neither the corset nor the most perfectly adjusted belt will replace the kidney or hold it in its normal position. Nor will it cure the prolapse. But they may and do often provoke serious irritation of the kidney by the pressure they exert which will eventually lead to inflammation in or about the organ.

2030 Broadway.

DISCUSSION.

DR. CARL WAGNER, Chicago—In every operation on so delicate an organ as the kidney cryoscopic examination is a most important preliminary step. This most scientific means of diagnosis of disease of the kidney has been greatly perfected and used extensively with great advantage and satisfaction by the eminent workers, Von Koranyi, Leopold Casper, Friedrich Richter, Kummel, Beckman and others. It is in use all over Europe, while we hear little of it in America as yet. By the author's new suture, which places the kidney in an absolutely physiologic position, is secured a more perfect result than we have ever achieved before. I have used a similar method[1] on the stumps of ablated uteri. I called the suture a guy-rope, and it is intended to hold the stump in position against the parietal wall of the peritoneum. It is fastened over a Maydl bridge and keeps the stump of the uterus in that position until the external wound is closed. The guy-rope is a silk suture carried through the stump and knotted at its end, so that it can easily be removed when the granulating wound is almost healed shut. I have done the same thing on the kidney by putting two lateral sutures through the capsule and fastening over a Maydl's bridge, left *in situ* for twelve days with great satisfaction. The strip of gauze which Dr. Goelet inserts under the lower pole of the kidney for drainage corresponds to some extent to Dr. Senn's method, with the only difference that the gauze strip is used by the latter in larger size and serves as a rest and means of suspension for the lower part of the kidney. I would leave this strip in about six days, so that it not only drains but also favors the development of granulations, as another reliable means for fixation of this organ.

DR. L. H. DUNNING, Indianapolis—I believe we have not yet found the ideal method of operating on the kidney, although 150 successes ought to commend any method. Dr. Goelet's success, however, I think, is due quite as much to the gauze as to the method of placing the stitches. I long ago gave up the idea of attempting to retain the kidney with stitches without opening the fibrous capsule, which, if allowed to remain intact, serves as an obstacle to the formation of firm adhesions unless you get them from the perinephritic fat. I believe that if Dr. Goelet would leave out his gauze and use only his method of suturing he would have an occasional failure. I can not see the advantage of leaving the fibrous capsule intact. I have never observed any ill effects from opening it; I have opened it at least 40 times. The objection that he advanced, that the kidney has been anchored too low by former methods, is true. If the kidney is anchored as indicated in the drawing, through a vertical incision, even this method will leave the kidney lower than normal. We often find that we can palpate only the lower pole of the kidney even when we incise close to the twelfth rib. We must pull the kidney down into the wound. The kidney is about two-thirds of an inch above the twelfth rib in many cases, if not in the average case, so that even in these cases we anchor it lower than normal. But I do not believe that that cuts any figure whatever in the results. I do believe that the opening of the capsule is very beneficial in overcoming the attendant pain and in helping to establish stronger adhesions to the contiguous parts. The after-treatment is very essential. Constipation and vomiting being among the most frequent causes of poor success in the anchoring of the kidney, I look very carefully after the bowels. I do not give any food that is likely to cause fermentation, and whenever there is a tendency toward, or a desire for, a bowel movement the patient should be assisted in every possible way. This is so important that it is advisable for the operator to look after it himself.

DR. EDWIN RICKETTS, Cincinnati—A record of 159 operations in three years with no failures is the best record in this country or Europe. I want to commend the silkworm gut suggested, and also the practice of bringing the kidney higher up without splitting the capsule; and yet, possibly, there might be one thing to take into consideration, and that is, if in the future that kidney might be affected with Bright's disease, such a splitting of the capsule, if that is a cure of Bright's disease, could have prevented the occurrence of that disease. I agree with Dr. Dunning that without the use of the gauze Dr. Goelet would have had some failures. The gauze must of necessity bring the kidney higher up than any other operation that has been devised. I do not think that it is wise to slit the capsule, because this is a healthy kidney and the slitting opens the door for infection. The operation is to be commended from that standpoint and also because of its simplicity.

DR. JOHN G. CLARK, Philadelphia—What constitutes a movable kidney? In every abdominal section during the last two years where the incision was of sufficient size, I have introduced my hand, passed it backwards into the loin and, with the patient in the Trendelenburg posture, letting the tips of the fingers lightly rest on the ventral aspect of the kidney, gently drawn it downward to its lowest possible point. During this maneuver an assistant measures the distance traversed by the arm to estimate the range of the kidney. I am certain that too little stress has been laid on the fact that under normal conditions the right kidney may be a very movable organ. I have always looked with considerable scepticism on a simple movable kidney as a factor in the exaggerated symptoms which are sometimes attributed to it. If the mobility is slight and the symptoms are markedly of the gastro-intestinal type, a general enteroptosis is usually the principal factor. In the measurements of the range of mobility of the right kidney I have found that it was seldom under 2 cm., and many times from 3 to 4 cm., and yet the history of the case showed no symptom whatever that could be ascribed to this apparently undue excursus of the kidney. The left kidney seldom has a mobility of more than 2 cm. With these definite anatomic facts before us, it would be well to study a case very closely before we determine that a kidney, the lower pole of which may be distinctly felt below the borders of the floating rib, is a distinct pathologic entity. We are frequently told that movable kidneys are not relieved by abdominal binders. This, I believe, is in a large measure true, but in many instances of so-called movable kidneys, where binders or properly fitted corsets are applied, the patient experiences a considerable if not total relief. This is an apparent paradox, but apparent only, for such cases come under the classification of enteroptosis rather than of true movable kidney. I believe that the classical symptoms of marked gastric indigestion more or less dull or acute pain on the right side, marked respiratory mobility of the kidney, which may be so exaggerated under bimanual palpation as to force the kidney well down toward the pelvic brim or Dietel's crises, must be looked on as coming directly from the undue range of mobility, and that such cases may be considered as favorable for symptomatic relief in the event of a successful suspension or fixation of the kidney. In my opinion there are but three methods of fixation which should be considered: 1. By suture, very much as Dr. Goelet has described. 2. By splitting the capsule, turning it back and using it as a suspensory medium. 3. The use of a rubber tube or gauze as a sling to lightly

1. Chicago Med. Recorder and Jour. of Obstet.

draw the kidney up into the wound and hold it there until adhesion has taken place sufficient to retain it in an unmovable position. For more than a year I employed the stitch suggested by Brödel from his anatomic studies, which is similar to that described in Dr. Goelet's paper. The principle of this suture is that by its triangular introduction it snares, as it were, the connective tissue stroma of the kidney and thus bears more strain than does the simple suture passed directly into the cortex of this organ. I do not believe this suture can be improved on. The only question is the serious one, is it advisable to introduce directly into the pulp of the kidney any suture? I know well that, as a rule, no serious complication follows this procedure, but I believe it would be better and more rational to employ the method suggested by Edebohls. For the last year I have constantly employed the latter, and am so far entirely satisfied, although I have not had sufficient experience to justify me in fully commending this method. The third method has not appealed to me as a satisfactory surgical procedure, although Beyea, Penrose and others have had success with this method. Until I have further evidence my choice of method will be that described by Edebohls.

DR. C. S. BACON, Chicago—Does Dr. Goelet use the subcuticular suture and also drainage?

DR. GOELET—I use the subcuticular suture for closing the skin only.

DR. C. L. BONIFIELD, Cincinnati—Many movable kidneys do not really require an operation. A movable kidney is somewhat like a hernia. The vast majority of hernias in the adult require operation, but I have known cases of inguinal and femoral hernia to disappear when the patient became robust and took on additional flesh, and to recur during or after a long spell of illness. I think the amount of mobility of a kidney depends largely on the amount of perirenal fat. Many of the cases operated on for movable kidney do not require surgical treatment at all, although I do not mean to question Dr. Goelet's cases. I would advise the general practitioner to treat the neurasthenia, the indigestion and the general health of the patient.

DR. D. H. CRAIG, Boston—I have seen a number of cases of movable kidney associated with splanchnoptosis that have suffered materially through the perfectly honest and conscientious efforts of general practitioners who, in trying hard to keep abreast of the times, have prescribed abdominal belts. The belt supports temporarily and possibly benefits the patient for the time being, but only in a certain degree. After the belt has served this purpose the patient is left in a worse condition for operative procedure than before.

DR. A. H. GOELET, New York—One reason why this suture is as strong as it is, and why it will pull the kidney up into its normal position under the rib without tearing out, is that no matter which way you pull on it the traction is in an upward direction parallel to the surface of the kidney and its fibrous capsule and not at a right angle to it. There is one objection to leaving the drain in for more than twenty-four hours. I find that when I remove the drain there is a great deal of accumulated discharge behind it, and if this discharge is allowed to remain there it will get in between the kidney and the structures of the back to which the kidney has been attached and thus interfere with the formation of adhesions. That is, the gauze ceases to be a drain after that time. I laid particular stress on the importance of stripping the colon from the kidney. I believe that is one of the most important points in making a success of the operation, and one of the most frequent causes of failure when it is neglected. Where it is left attached to the kidney, if it does not pull the kidney loose it will drag on it and cause pain and other disagreeable symptoms. I have left the gauze drain out in a number of cases and have had success in every instance. Sometimes I think it is not necessary. When there is very little fatty capsule to get out of the way I frequently leave out the gauze drain and my results have been just as good. As to stripping the fibrous capsule from the kidney, I see no reason for mutilating the kidney in this manner when we can secure fixation just as well and better without doing so. If the detached fibrous capsule is utilized for fixing the kidney it is invariably fixed too low down. I have had a number of patients come to me after operation by that method by other operators, and they were still suffering, though the kidney was fixed, even worse than before the operation. I therefore oppose that method of securing fixation of the kidney. I see no reason for considering this a serious operation, as Dr. Clark contends it is. If I can do 150 nephropexies without a death—and others may have the same results if they adopt the same method—it can not be a very serious operation. My sutures do not penetrate the parenchyma. The needle may wound it in penetrating beneath the fibrous capsule, but that is insignificant and does no harm. Formerly, when a patient would not consent to an operation I yielded and ordered a belt. But now I never prescribe a belt before operation if I can avoid it. In the first place it delays the operation because the patient gets temporary relief, but she invariably comes back worse than before, and the operation becomes a necessity sooner or later. Two years ago I was consulted by a lady with a prolapsed kidney that was causing symptoms. She felt obliged to postpone operation and I prescribed a belt. She returned a little latter saying that she felt so well that she would not have an operation done. Two years afterward she came back to me for another trouble. I asked her to let me examine the kidney, which she said was giving her no inconvenience. I found it fixed in an abnormal position as the result of perinephritic inflammation caused by irritation from the belt, and examination of the urine showed a pyelonephritis, which did not exist at the time of her first visit. This is an illustration of what the belt will do, and emphasizes the necessity of early operation to correct the malposition. The corset, or any other form of external support, is to be placed in the same category with belts and is open to the same objection.

INHIBITED TUBAL PERISTALSIS: A CAUSE OF ECTOPIC GESTATION.*

O. G. PFAFF, M.D.
INDIANAPOLIS.

In submitting this contribution for your consideration, its brevity may be urged as a virtue. A great deal has been written concerning the etiology of ectopic gestation, some of which has approached demonstration, more has been speculative, but certainly much has been done toward the solution of many of the attending phenomena.

The function of the ciliated epithelium of the oviducts has been made much of as the chief, if not the sole, motive force in the transportation of the ovum into the uterine cavity. Building on this assumption Tait and others have attempted to show that in the destruction of the cilia by the inflammatory diseases of the oviducts, the function of the tubes is destroyed and the resulting inertia is to be regarded as the prime factor in the production of tubal pregnancy.

According to Lilienthal, Williams and others, the most frequent site of the chorionic attachment is at the isthmus, near the uterine horn, which would make it appear that if the cilia are really the essential factors of the transportation apparatus the destructive force of the inflammation must have spent itself uniformly in the uterine end of the tube, which is not in accordance with the observed facts in the history of salpingitis. There are many instances of tubal pregnancy in which the cilia appear to be present in normal condition and abundance. In some cases anatomic peculiarities, such as sacculation

* Read at the Fifty-fourth Annual Session of the American Medical Association, in the Section on Obstetrics and Diseases of Women, and approved for publication by the Executive Committee: Drs. A. Palmer Dudley, H. P. Newman and J. H. Carstens.

and diverticula, have been demonstrated and are apparently the determining cause of the abnormal location of the embryo. Aside from these purely mechanical and obstructive causes there are other pathologic conditions of the tubes resulting from inflammation which are entirely overlooked by the followers of Tait, and which are of a quality to be justly accredited as being direct causative agents in the production of extrauterine pregnancy.

Again, it is well known that a great many cases occur in tubes giving no history of disease and in which no local pathology can be demonstrated, so that the conclusion is that ectopic pregnancies occur in some instances in perfectly healthy tubes. From these considerations which might be presented in a more elaborate manner, I think we may justly question the accepted position of the ciliary motion as the force which paddles the ovum down the tubal canal into the uterine cavity, and that we are compelled to seek some other explanation of the performance of this function.

The fallopian tube is in a certain sense an excretory canal and is similar in its anatomy to the ureter, the vermiform appendix, gall ducts and the intestine. Like them, it is provided with longitudinal and circular muscles. In all of these organs we have long since assigned an important rôle to these ingeniously arranged muscular fibers. The intestine, the appendix, the gall duct and the ureter are known to engage in an active peristalsis when sufficiently stimulated by the presence of materials within the canal, which it is their function to excrete. There is apparently every reason to suppose that the similar function of the oviducts is performed in identically the same manner, although the peristalsis of the tube when admitted at all has been referred to as a very minor and insignificant attribute.

I believe that for the performance of their function, that is, the physiologic emptying of all mucomuscular tubes, Nature has provided a general method, viz., peristalsis. This action when not interfered with by pathologic conditions or untoward influences operating through the nervous system, is at all times efficient and does not depend on an auxiliary force for the successful performance of its function. That ciliated epithelium does not invariably possess the function of a propelling force is evident by its presence in the lateral ventricles of the brain. There is a ciliary wave toward the body outlet in all mucous surfaces which have this peculiar epithelium, but it seems to be for defensive purposes.

In the fallopian tube I believe the cilia are provided for another essential and an entirely different purpose. The ovum is a most perishable structure, one whose delicate walls could not withstand the pressure of contracting mucous surfaces brought into apposition through the agency of peristaltic force. Therefore, in order that this force may not prove fatal to the ovum, it is necessary that some provision be made by which it shall be protected from this peristaltic pressure in its journey to the uterine cavity. Now, the arrangement of the cilia provides a bed of velvet on the pile of which the hope of the race safely rests in passage. The pressure of the visitor through the delicate ciliary bed conveys the signal to the presiding nerve center and the rhythmical muscular contractions are at once inaugurated and the ovum is gently rolled along into the uterine cavity. If we admit that peristalsis does play a very important part in the transportation of the ovum, then certainly the numerous factors which occasionally operate to produce paralysis of function in similar structures may fairly be regarded as causes of tubal gestation.

We are familiar with the serious results of inflammatory adhesions affecting the intestines and the appendix, not only in the mechanical constrictions, but also the interference with peristalsis from the abnormal fixation, and it is extremely probable that similar affections of the tubes are equally potent to work disastrous interference of function. The reflexes must not be ignored in this consideration. When an impacted calculus in the urethra causes such evidence of bowel obstruction that operation is determined on, it is not unreasonable to suppose that the function of the tubes may be likewise affected in a similar manner and degree.

Psychical effects are also of noteworthy importance. We are familiar with the cases in which the menstrual function has been immediately and permanently abolished through the mysterious influence of some profound and sudden revulsion of feeling, some horrible experience or great shock, etc. The hope or fear of pregnancy not infrequently generates the subjective symptoms and many of the physical signs of that condition. Evidence is not lacking to sustain the belief that similar agencies produce in the tubes results of a like quality to those observed in similar structures which offer more abundant opportunities for demonstration.

A very suggestive case, recently referred to me by Dr. Patten of Morristown, Ind., is worthy of notice:

Mrs. B., aged 32, the mother of one child, 4 years of age; no history of pelvic disease could be ascertained; during her pregnancy no unusual symptoms had been noted other than some slight intestinal disturbances; since her confinement, however, she had experienced rather frequent attacks of a colicky pain in the umbilical region.

Feb. 19, 1903, I was called to operate on her for a painful, elongated tumor of the left lower abdomen. Her last menstruation had occurred one month previously in a normal manner. The only symptom complained of was the rather sharp and persistent pain in the left side. A laparotomy proved the tumor to be the pregnant left fallopian tube distended to the size of a sausage roll and firmly attached at the fimbriated extremity to the transverse colon. The uterus was apparently suspended in this manner, the fundus inclined toward the right side, the left horn occupying the highest point near the median line.

I can see but one explanation of this peculiar malposition of the tube. It could not possibly have been the result of the ordinary chance occurrences, but was undoubtedly carried upward with the development of the pregnant uterus (possibly a pregnant left horn) becoming firmly adherent to the colon through the agency of an unrecognized inflammation, and, as the uterus receded following delivery, this rare relationship was maintained. The attachment to the gut was of a very firm and intimate character, requiring the most careful dissection in its separation. As a result of this firm attachment the tube was constantly stretched between two practically fixed points, the weight of the uterus continually taking up whatever slack the colon was disposed to grant. Under these circumstances there could scarcely be any possibility of tubal peristalsis, and when pregnancy occurred within the inert tube there was no force present capable of propelling the ovum down into the uterine cavity, and the chorionic attachment near the fimbriated extremity of the tube was the result.

As the tubes both appeared to be anatomically normal, it seems to me that the logical conclusion is that the abnormal location of the gestation sac was due to the inhibition of tubal peristalsis. I will also suggest that the inflammatory thickening of tube walls, and also the splint-like action of adhesions, may so interfere with

peristalsis that tubal pregnancy may result, regardless of the condition of the cilia.

There is undoubtedly a lack of positive knowledge concerning the pathology of ectopic gestation, and this presentation of an unusual phase of the subject is made with the hope that it may in some slight degree stimulate further investigation relative to this important matter.

DISCUSSION.

DR. L. H. DUNNING, Indianapolis—We can not dismiss the subject on the ground that we know nothing about it, for the reason that we know that there are conditions which are at least conducive to the development of an ectopic gestation, such as crippled and diseased tubes, malposition, loss of cilia and thickening of the tube by endometrial deposits, etc. Dr. Pfaff is very logical, but I do not believe he has settled the question.

DR. HUGO EHRENFEST, St. Louis—The theory advanced by the essayist is very interesting and very similar to the hypothesis advanced some time ago by Oliver, an English gynecologist. He also contends that the lack of peristalsis in the tube has much to do with an abnormal lodgement of the ovum in the tube. He suggests a connection between absence of sexual feeling and lack of peristalsis in the tube. During the sexual orgasm the uterus and, in all probability, the tubes contrast. Oliver believes that in women who lack sexual feeling entirely there may be a lack of peristalsis in the tubes. I think, however, that a paper published about a year ago by Opitz solves the question of the etiology of ectopic pregnancy satisfactorily. Almost all the investigators made the place of implantation of the ovum the object of microscopic examination. Opitz limited his investigations to that part of the tube lying between the site of implantation and the uterus itself. He examined 23 pregnant tubes, cutting the desired portion of the tube into serial sections, and in every one he found changes due to inflammatory processes. Of course, the changes were different in degree, but he found common to almost all the tubes a thickening of the mucous membrane, a partial destruction of the epithelium, and that very many of the adjoining folds were agglutinated at their edges forming blind hollows or sacs. That would give us a very plausible idea for the occurrence of tubal pregnancy. There are cases on record where the abnormal implantation of the ovum was explained by the fact that there was a congenital diverticulum of the lumen of the tube. Such a malformation of the tube, however, is very rare. If the formation of such blind alleys really is an almost typical result of inflammatory processes in the tubes, as suggested by Opitz, it would seem natural that ova should often be caught in these sacs on their way from the ovary to the uterus.

DR. G. BETTON MASSEY, Philadelphia—Several years ago, by inquiry in a number of these cases, I learned that a large proportion of women suffering from ectopic pregnancy had some time previously been subjected to forcible dilatation of the cervix. I do not mean to say that the dilatation caused the subsequent extrauterine pregnancy, although it might have done so. But a more probable explanation is that the dilatation was done for a condition which did not prevent the consequence of that condition. The dysmenorrhea being really due to a mucopurulent catarrh the dilatation was not a success. This subject of forcible dilatation as a cause of extrauterine pregnancy deserves further investigation. Abnormalities of pelvic functions should be considered more as a physiologic deviation, and not as though the pelvic organs were a non-vital mechanism which could be patched up every time the mechanism was out of order.

DR. J. H. CARSTENS, Detroit—In nearly all cases of ectopic gestation one of Nature's methods is to cause adhesion of the tube somewhere to prevent a so-called tubal abortion; thus the fetus is held in the tube and hemorrhage prevented, and if the tube distends it does not cause the passage of the fetus and the placenta out of the end of the tube, but in the direction of least resistance, that is, in the broad ligament. With hemorrhage in the broad ligament there is less danger. That generally subsides on account of the dense peritoneum covering which is one of Nature's methods of preventing death. We find adhesions in every case, but nearly all are recent. The tube is adherent to the rectum, sides of the pelvis or bladder or anywhere, showing that there has been an old adhesion; some old lesion that has not been absorbed and has probably caused a twisting of the tube, preventing its physiologic action and thus inducing the ectopic gestation. This contribution adds one point to the complex and diversified etiologic factors that produce extrauterine pregnancy.

DR. F. F. LAWRENCE, Columbus, Ohio—Interstitial extrauterine pregnancies occur in the uterine portion of the tube, and also in the fimbriæ ovarica. What effect can peristalsis have on these parts? Again, nearly all have noticed, in operations for salpingitis, constricting bands all along the tube at irregular points which practically occlude the tube, so as to prevent the passage of spermatozoa or the unfructified ovum. Several of these bands frequently occur on a tube that otherwise has no evidence of serious inflammation. Are not these partial or almost complete bands an exciting factor? Has any one had a case of ectopic gestation in which there was not found on close questioning a history of tubal trouble prior to the pregnancy? I have yet to find a case in which there was not a distinct history of tubal trouble, especially premenstrual pain or irregular menstruation. Every woman who is or has been the subject of tubal inflammation, no matter of what variety, is in danger of tubal pregnancy.

DR. C. O. THIENHAUS, Milwaukee—I believe there are many causes for this malformation. The idea has been advanced that all cases of extrauterine pregnancy show previous gonorrheic infection of the appendages. It is true that careful examination of many cases will reveal that a previous inflammation existed in the lower abdomen. In other cases we find that the patient has one child and after a period of three to five years, during which she showed at one time symptoms of tubal inflammation, she becomes pregnant in the tube. But there are other cases. I found in one case a cyst in the broad ligament as large as a man's fist, the tube on the right side was hanging over the cyst containing on its fimbriated end, which was adherent in the depth of Douglas' pouch, the extrauterine gestation. In another case I found a dermoid cyst of the ovary as large as a man's fist, which was probably the cause of the extrauterine pregnancy. The appendix in this case was found in a state of chronic inflammation and adherent to the gestation sac. Diverticula in the tube may be another cause. It is essential not to forget that in all cases of tubal pregnancy that part of the mucous membrane of the tube on which the ovulum is implanted must have been normal at the time of nidation.

DR. A. PALMER DUDLEY, New York—Many women become pregnant who have appendages very much adherent. It is not a question of imperfection of the tube. In my judgment the cilia play a larger rôle than has been accredited to them. But we must not lose sight of the fact that the dynamics of the abdominal cavity enter in here in the matter of the conduction of the ovum into the uterine cavity, as will be better illustrated by the records of cases where a hydrosalpinx is drained through the uterus. The constant diaphragmatic action of the pelvic floor; the action of the diaphragm and intestines plays an important rôle in the passage of the ovum from the ovary to the uterus. The most important question, I think, is the patency of the tube, no matter whether the lining is ciliated or not; it is a vent. As an illustration that the tube may be occluded and pregnancy take place is a case recorded by Bandl, where a vaginal hysterectomy was made and the uterine extremity of the tubes brought down into the vaginal vault. This woman became impregnated and had a tubal pregnancy of two and a half months, which aborted into the vagina. In my judgment the question of patency of the tubes is the all-important one, and then the dynamics that assist in carrying the ovum to the uterus.

DR. T. J. BEATTIE, Kansas City—I believe that every case of ectopic pregnancy would show a history of preceding trouble in the tube in some portion of the pelvis. About a

year ago, in a ruptured tubal pregnancy, I found a small cyst in the broad ligament.

DR. O. G. PFAFF, Indianapolis—As we all seem to think, there is in most of these cases a pre-existing tubal disease, but I have found pregnancies in tubes that were absolutely normal, although this is probably rare. In reply to Dr. Lawrence, the uterine end of the tube is just the point where we get most of our tubal pregnancies. The object of the paper was to get away from the purely mechanic causes of tubal gestation and to consider whether there is not some explanation to be found in the interruption of tubal peristalsis.

CONSERVATIVE SURGERY OF THE SCLEROTIC OVARY.*

HUGO O. PANTZER, M.D.
INDIANAPOLIS.

The real risk to life appertaining to the early peritoneal surgery, in the past, incurred and justified very radical measures. The comparative safety of the modern methods of operating no longer sanction special indications and rules for this field of surgery. Utmost conservatism is the essential characteristic of the principles and practices of general surgery. To-day these must apply to, and, fortunately, quite generally prevail in, gynecic surgery. Efforts along this line show eminent successes, albeit many disappointments as yet attend such a course. Its limitations require as yet greater definition. The notable gratifying result obtained in the following case has offset, in the writer's experience, many less satisfactory and even disappointing results from conservative operative work persisted in through many years. Its narration here, it is hoped, may have it exert its stimulating effect on the efforts of those likewise engaged.

Cirrhotic ovaries at this time, I believe, are quite generally accepted to afford the indication for their immediate removal. My experience is not ample enough to draw deductions from. The case about to be recited pertains to cirrhosis without decrease in size of the ovaries. Pertaining to sclerotic ovaries with shrinkage of the organs, the writer has no case of resection that was followed by pregnancy. However, it seems warranted from the subjective relief afforded in some instances and from the unmistakable evidences in some cases of an attempt on the part of Nature to restore the already lost function, that even in the shrunken ovary the morbid process can be arrested by timely conservative surgical effort. The writer hopes soon to report his experiences with such efforts.

The extensive and exhaustive consideration of this subject on this occasion by our worthy president relieves the writer from entering into a detailed consideration of the mooted points in connection with the following case:

History.—Mrs. C. L. F., Kidley, Ill., aged 25. Married four years, desirous of having offspring, no conception. First menstruation at 13. Menstruation irregular, commonly retarded, is always painful before and during flow. Following a heavy lift at 18 patient suffered constantly with pain in left inguinal region. At periods she bloats, and has sacral, pelvic, occipital and frontal pain. Poor appetite, depression and growing emaciation, weakness and suffering mark her complaints. She has occasional transient attacks of bladder irritability and suffers from constipation.

Status præsens.—Patient is a small, lean, weakly woman. Floating tenth ribs, both kidneys movable. Thin, relaxed abdominal walls, flat miserable thorax. Uterus in retroflexion, somewhat fixed by contracted left broad ligament. Left ovary imprisoned by adhesions, tender, enlarged. Right ovary normal size. Slight contraction of internal os uteri.

Diagnosis.—Retroflexed uterus. Prolapsed and enlarged adherent left ovary.

Operation.—Deaconness Hospital, Jan. 16, 1902. Internal os was dilated. No curettage. Median celiotomy. Tube and ovary on left side were massed by inflammatory adhesions. No pus was found. Left ovary had cyst the size of filbert at one pole. Both ovaries were densely and thickly sclerotic, rather larger than normal size. Left ovary was removed entirely. A narrow wedge was cut from the entire length of the convex border of the right ovary. This displayed a ledge of sclerotic tissue one-eighth of an inch and more in thickness, revealing no evidence of normal ovarian stroma in this area. The ovary in its deeper parts, like in the superficial parts, bled very slightly, but in contrast with the latter revealed small islets of what seemed normal stroma. Indeed, this was so little apparent as to, in my estimate, include very little promise. However, there had been menstrual flow which could not be discountenanced. The surface of the ovary was pared in wedge form, the base of the wedge being at the border. The central slit was sewed with interrupted catgut sutures. It was striking that there was practically no bleeding. The uterus was ventrosuspended by its anterior surface near the fundus.

Patient made an uneventful surgical recovery, though her strength was slow to grow. Her feebleness preceding her operation seemed accentuated at this time.

Results.—Patient reported for examination two months later. There was some general improvement all along the line, though general conditions were still very unsatisfactory. Menstruation had occurred regularly, with lessened local and reflex suffering. Hygiene, iron, ergotin, strychnia and aloes were prescribed.

Patient reported again July 17, 1902. There was great general improvement, physical and psychical. She walked like an entirely different woman. She had missed her flow and was anxious about this. She complains of some pain through the sacral and lumbar region. Bladder had continued occasionally irritable, more so latterly.

Examination.—Uterus is found in good position, enlarged, softened, not tender. Vaginal mucosa softened and edematous, of bluish color. Right ovary to touch feels quite normal as to consistency, though obviously small. There are no evidences of ovarian adhesions.

Diagnosis.—Pregnancy.

March 17, 1903, patient writes me of her happy confinement with a fine nine-pound boy two weeks previously, and expresses her and her husband's unbounded happiness over the event.

DISCUSSION.

DR. L. H. DUNNING, Indianapolis—Dr. Pantzer's innovation worked well in this case. But he himself raises the question whether this method is commendable, viz., to leave such a large raw surface on the ovary. I have always felt it safer to cover all raw surfaces of the ovary. I think Dr. Pantzer's experience was unique in that he had no hemorrhage. I have never been able to do so much cutting on the ovary as he did without experiencing considerable difficulty in arresting hemorrhage.

DR. A. PALMER DUDLEY, New York—I do not question that Dr. Pantzer left the ovary an open wound. He said he closed the wound by a circular suture. If he did that there was no necessity of covering it with peritoneum to get good results. Cirrhosis of the ovary is due to obstruction of the circulation. His case was complicated by adhesions and dislocations, and one ovary contained a cyst. I have operated on very many of these cases and have seldom found a true cirrhotic ovary fruitful after any form of treatment. I think the relief the ovary obtains from this method of treatment was not due solely to the ovary itself, but to the repair of pathologic conditions that accompanied the cirrhosis and the ovary also

* Read at the Fifty-fourth Annual Session of the American Medical Association, in the Section on Obstetrics and Diseases of Women, and approved for publication by the Executive Committee: Drs. A. Palmer Dudley, H. P. Newman and J. H. Carstens.

derives benefit from the development of a new circulation. It is wise not to cut the ovary crosswise. I never operate on an ovary to save any portion by incising it crosswise, as we in that way section the nerve supply of the ovary and do material injury. If it is necessary to remove portions of the ovary it should be done along the upper horizontal surface of the ovary; one can take out almost any quantity of tissue and still have the remaining portion act because the ova are on the outer surface of the ovary although some follicles are found as low as the hilum. Unless operated on in the manner described by Dr. Pantzer the circulation is renewed through different channels, the uterus is restored to its position, and the ovary after a time receives new life. The thickened tissue will undergo fatty degeneration and in that way the ovary is restored to a normal condition. I am so situated in the Harlem Hospital that I can do anything I please without question. During the past winter I have been experimenting on tuberculosis of the testicle. I find that I can split the testicle in half and unite the wound with fine silk suture, sweep out the tubercular deposit, touch it with formalin and carbolic acid, and have a distinct recovery without rise of temperature. So the work described by Dr. Pantzer is only another evidence of how much work can be done on the uterine appendages of women.

DR. H. O. PANTZER—The method of operating in this case is open to the objection that raw surfaces were left involving the possibility of intestinal adhesions. This risk is unavoidable here. A close search subsequently for evidence of adhesions in this case failed to detect any. Perhaps the risk from a raw surface is magnified in our minds. In days past when adhesions were frequent, non-absorbable sutures were generally used, and undoubtedly often were the cause of adhesions. Permanent adhesions giving trouble nowadays are certainly rare. In the class of cases to which this belongs the family interest at stake is great and seems to warrant taking an unusual risk. In the light of the result obtained in the case reported the procedure may be justified. I have done conservative work on the ovary many years. Nine of my cases were followed by one or more pregnancies. I have attempted conservatism where sclerosis is associated with shrinkage of the ovary, so far with no more result than to produce the evidence of menstrual molimen in cases which had been without this and without any flow for months, and even several years. This result would seem to indicate the possibility of obtaining definite results if operation is early undertaken. Waldeyer confines the area in which ova are found to a small rim one-eighth of an inch in thickness adjacent to the greater part of the outer surface of the ovary. This does not tally with microscopic evidence often found where the internal tissues about the hilus disclose ova. Clinically I have had the opposite evidence in two cases, where all but the parts of the ovaries about the hilus were removed and yet pregnancy followed.

AN OLD-TIME QUACK EYE DOCTOR,

THE CHEVALIER JOHN TAYLOR.

BROWN PUSEY, M.D.

CHICAGO.

Indexed under the heading "Charlatans," in the magnificent library of ophthalmologic literature of Dr. Casey Wood, there is to be found "The Life and Etraordinary History of the Chevalier, John Taylor, Ophthalmiator, Pontificial, Imperial and Royal; in two volumes; written from authentic materials and published by his son, John Taylor, Oculist; London, 1761." In looking this book over, I happened on Chapter V of the second volume, which is an oration said to have been delivered in the streets of Oxford. I quote this chapter extensively, and when one has read it, I think no apology from me will be necessary for calling attention to it; and when one realizes that this oration is said to have been delivered in the public streets, and after Taylor had sent "his harbingers before him" to deliver his hand bills, I believe the desire is natural to inquire as to what manner of man this ancient quack was.

"The Eye," says the Chevalier Taylor, "that most amazing, that stupendous, that comprehending, that incomprehensible, that miraculous Organ, the Eye, is the Proteus of the Passions, the Herald of the Mind, the Interpreter of the Heart, and the Window of the Soul. The Eye has Dominion over all Things. The World was made for the Eye and the Eye for the World.

"*Let there be Light*, that first Fiat of the Almighty, and there was Light. For whose Use, I pray? For the Use of Man, for the Use of the Eye. The Angels wanted it not. The Sun was kindled, the Stars were lighted up; the grey Dawn and the Milky way, the Constellations, the Morning Planets, and all the bright Chandeliers over Head, were all hung out, rank and file, to minister to this little Speck, this Peep-hole of the Mind, this Inlet of the Soul, this Surveyor of the Universe, this Lord of all Things, the Eye.

"The Eye is the Husband of the Soul; through it she conceives, becomes pregnant, and brings forth Knowledge.

"Amazing how such large Objects find a Passage through so small an Aperture.

"The Eye is indefatigable. The Eye is an angelic Faculty. The Eye, in this Respect, is a Female. The Eye is never tired of feeling; that is, of taking in, assimilating, and enjoying all Nature's Vigor.

"All Nature is but one great Act of Love. The material and immaterial World conceive and bring forth together. The other Senses are the Soul's Gallants, such as Hearing, Feeling, Smelling, and so forth, with which she intrigues a Moment or two, and then returns to her lawful Husband, the Eye.

"The Children got between the Soul and the Eye, are legitimate Nature's genuine Issue; some of which can only with herself expire; the Brats of the other Senses die as soon as born.

"In corporal Generation too, how powerful is the Eye! It is the Signal of the Affections; and with a single Glance can proclaim the Pulsations of the Heart. It is the Lightning of Desire, and the Loadstone of the Soul; whose magic Effluviums inchant the Imagination, attract the Coalitions, irritate the Muscles, stimulate the Nerves, and brace up the whole Apparatus of Propagation.

"The green Mantle of the Earth, the azure Night-gown of the Sky studded so thick with Gold, the Trees, the Flowers, and the Gardens, the Gems, the Carbuncles, and even the Diamonds themselves, begot by Nature in the secret Womb of the Earth, are all brought forth by the Midwife Industry, are all polished to the purest Ray, to entertain, to regale the Ravished Eye.

"We owe the Ladies to the Eye, those Transcripts of the Angels, those Specimens of future Bliss, those Fountains of Joy, those Dainties of Desire, those Cordials of all human Care, who people the Earth with their Energy, and the Sky with Inhabitants; these Patterns of Purity and Love, these Master Pieces, these lucky Hits of Heaven, are the finest Regale for the Eye of Man, where it feasts on the Ruby of the Lips, the Vermillion of the Cheek, the Snow of the Forehead, and the Cherub in the Eye; and yet even these are but the Signs, the Invitations held out of that extatic, that soul absorbing—But Language is too weak.

"This is the greatest Good the Eye can give us. Without the Eye what were all this amazing World of Charms? a mere Mouthful of Moon-shine, a Sheet of blank Paper, a Candle in the Desert; for my Lady is no more than Joan in the dark.

"What an Orator is the Eye! that Short-Hand, that Cypher of the Soul, whose single Glance conveys a Volume.

"The Tongue is an Upstart, a tedious Intruder, a limited Prate-roast; who speaks the Language of a single Kingdom or County perhaps, and that but poorly too. Words are an artificial, tedious, contracted, obscure and imperfect Commerce, a Kind of *Hocus Pocus*, a juggling Compact, agreed upon by a few and understood by fewer still; a Messenger sent a round-about Way to the Understanding through a certain, dirty, winding Canal; where a little Wax can stop its Career, or a paltry Fiber unbraced, destroy the whole Business.

"As far as the bungling Productions of human hands are inferior to the exquisite Works of Nature, so far is the Faculty of the Eye above that of the Tongue. How many Ages old was the Creation before that Babel, that Jargon of Sounds called Language, was sent among Men as a Curse?

"The Eye is the Orator of Nature, and talks the Language of the Universe, of all beneath the Moon, of all above it: It talks the Language of Heaven too; it renders useless all Sounds except the tender Moanings of Lovers, those turtle Cooings of Desire, those nameless Throbbings of Fruition; these, these are the genuine Dictates of the broken Raptures

of the Soul, which she scorns to shape into Words; nor can she lose Time in so base a Labor.

"The Eye is the quick Flash, the instant Lightning of the Piece. Language is the Shot that loiters after with much Noise, indeed, but seldom hits the Mark.

"O ye Sons and Daughters of Minerva, ye Children of Wisdom, ye Offspring of Oxford, how precious is the Eye! . . Of what importance is its Office? How deserving is the Art that keeps its Springs in Order, and preserves the Interchange of Office betwixt the Works of Nature and the Soul! Mind and Matter are kept in constant Traffic by the Eye.

"The three mortal Foes to Sight (my learned Sons of Wisdom) are the Glaucoma, the Cataract, and the Gutta Serena; with these I wage eternal War. These Auxiliaries of ancient Night, that would restore her gloomy Reign, and bring back Chaos to the World once more.

"My Art, O ye Sons of Oxford, my Art is the Ally of Heaven itself, and aids even the Almighty, obeying still, and still performing the omnipotent Behest, *Let there be Light.*"

Fortunately, it is possible to learn something of the Chevalier Taylor and his family—a family which becomes more interesting when it is known that the Chevalier's father, as well as his son and two grandsons, were physicians. Indeed, the son and two grandsons, probably influenced by the worldly success of the Chevalier, followed in his footsteps and waged war against the "Auxiliaries of ancient Night."

Our authentic information of the Taylors comes from the writings of the Chevalier and his grandson, John Taylor, the third. We have from the pen of the Chevalier, "The History of the Travels and Adventures of the Chevalier John Taylor," London, 1761, and from the grandson, "Records of My Life," by John Taylor, Esquire, in two volumes, London, 1832.

Mentally the Taylor stock evidently was good stock. The sire of our oculists was a man of ability, and was a surgeon of prominence in Norwich, England. We are told by one of his colleagues that he was highly respected in his private as well as in his professional character. In the light of the history of the son, the Chevalier, a statement of one of the senior Taylor's friends becomes interesting. This statement was to the effect that the old gentleman had so grave and dignified an aspect and demeanor that the superstitious among his neighbors imputed supernatural knowledge to him, and on any disasters or losses consulted him as a conjuror. It is a well-recognized fact that the latent energy in a lie is enormous, and here we have the intimation that the same is the case in other forms of imposition. Maybe the tricks of the sire as a conjuror was the beginning of the quackish proclivities that later were so highly developed in his descendent.

The Chevalier Taylor was born in Norwich, England. In his own memoirs he does not give the date of his birth, nor does he say much of his early life; in another history of him we are told that he was born in 1703. He does, however, suggest the idea that the place of his birth may one day be judged worthy of the notice of posterity. Of his birth and early days the comments to be found in another place are interesting. One finds the statement: "He no sooner began to distinguish objects than he expressed the greatest aversion to all spots, either on the garments or countenances of those to whom he came near. Patches worn on the face being then in fashion, he often scratched them off and sometimes brought the blood along with them; nay, even then he put some eyes in danger!" Certain it is that in the birth of this man there was the beginning of the life of one of the master quacks.

The methods now in vogue among quack eye doctors seem to be used by all of them. In their advertisements they speak of "new system," "cross-eyes cured without the knife," "dissolvement treatment," or "absorption method," "optic nerve diseases." They advertise that they have written books on "Eye Diseases Cured Without Surgery," "Cross-Eyes," "Cataracts." "Eye Tests," etc. These books are usually described as a "Brief Treatise on the Application of His Remarkable Discoveries." In their advertising pamphlets—their "books"—they tell of their extensive travels and of the great opportunities they have had for the study of the conditions they want to treat; they publish the names of people whom they claim to have cured of awful complaints (particularly names of people in public positions, e. g., a United States Senator), and they publish pictures of conditions which they claim to have cured (these pictures frequently are taken from some standard work, but, of course, are claimed as original). The great standby of the modern quack, as we all know, is the "new system of curing cataract by absorption" and "cross-eyes without the knife."

Our great quack's methods were the same as those in vogue now. He had the new system of curing cross-eyes and cataracts, he published books describing his great opportunities, and giving the names of his patrons and giving pictures of the conditions that he cured. But his was a master's hand. In comparison the quacks of the present day are a cheap lot and they are not to be mentioned in the same class with this old faker.

Taylor's advertisement on settling in England after he became an old man is the book we before spoke of, "The History of the Travels and Adventures of the Chevalier John Taylor, Ophthalmiator, Pontificial, Imperial and Royal." Even the binding of these books—the history is published in three volumes—shows the superiority of his methods over those of the present-day quacks. The volumes are bound in handsome leather with gilt edges. The modern quack puts out his books with paper bindings and his picture on the back. (By the way, these pictures usually show a bald-headed, elderly man, with whiskers and a general expression which may be taken as indicating kindliness and knowledge and offer a terrible proof of that truism that appearances may be deceptive.)

The modern quack's pamphlet opens with interviews taken from the daily papers. Not so the Chevalier's history. The three volumes are dedicated respectively to his son, to David Garrick, and to the Merchants of London. The very first paragraph of his preface is interesting and shows his shrewdness. "Notwithstanding, by the title of this work my readers are prepared to be chiefly acquainted with numberless extraordinary adventures of my life, I flatter myself that it will not be displeasing if I here observe that I have not forgot the object most worthy of my attention, I mean the profession in which I have so long labored to be distinguished." The key-note of his book is found here; the book is for the purpose of impressing the reader with the author's professional greatness, while he is led to believe that it is a record of travel and adventure. The second volume of the history at my command has an interesting bit of evidence of the Chevalier's success in this particular in the book plate of some collector, which may be taken as indicating that the volumes at some time were considered worthy of such a mark. No bibliophile of the present would so mark the book of a modern quack.

It would not be profitable to follow far the adventures of the Chevalier. According to his statement he traveled through England, Ireland and Scotland from 1727 to March, 1734; from that time to November, 1735, he was in Paris and the towns of France, then to England for a few months, but back to Paris in 1736 and 1737; during 1738 and 1739 he spent the time in Spain; then to Lisbon and the towns of Portugal until 1742; then to England, Ireland and Scotland, where he remained until February, 1747; then to Germany during 1748, '49, '50, '51; then to Sweden, Russia and Germany until 1755, when in January he went to Italy, where he remained until January, 1757; then to Austria, Germany and Holland; then in January, 1759, to Scotland and through the towns of that country and Ireland and back to London in 1761, where, according to his book, he was ready for business.

In the journey, of course, he had experiences worthy of relating, but with few exceptions his stories are unentertaining and tiresome. In these travels he learned the various languages, and he calls attention to the necessity for one like himself to know the languages of the different peoples.

As was said, it was evidently his method of advertising to publish books written in the different languages of the various countries that he visited, and his travels may be traced by these books. In his list of books written by himself he claims to have published forty-five. One of his favorite titles is "Mechanism of the Eye," which he published in English in 1727, in French in 1737, and in Spanish in 1738.

The year 1743 found him again in England, where he published a "Dissertation on a very Extraordinary Case Under the Care of the Chevalier Taylor." Among his publications was "An Accurate Description of 243 Different Diseases to Which the Eye and Eyelids are Exposed," which first appeared in 1747. He announces this same title in his list of publications as a new book in High Dutch, in 1751, and again the same title in 1771. A copy of this work fortunately is in the possession of Dr. Wood. One of the striking features about it is the handsome binding—just as we would expect from the "Chevalier." The drawings are crude and, at least from our point of view, are worthless, but certainly even now would attract the attention of the untrained observer. We have in the particular volume at my command a singular bit of testimony bearing out this latter suggestion. This volume, in which, by the way, the text is in both German and Latin, in its career has been in the hands of a layman—as was no doubt according to the original plans of the author—who presented it to a relation, an ophthalmologist, with the letter from which the following is copied:

"If it has intrinsic value, so much the better; if not, keep it lying around where your patients can see it. It looks so learned you can without hesitation charge them in two languages."

It has been intimated that Taylor was a successful quack in a worldly way. If his book may be believed he was very successful. Good evidence of this is shown in the letters warrant from the potentates of the countries that he visited. These letters are published as foot notes in the first volume of his "History"—evidently so placed that he who runs may read. The first one of these letters published is from Pope Benedict XIV, who appointed Taylor Ophthalmiator Pontificial. He was appointed oculist to George II, King of England, and he received similar appointments from Augustus III, King of Poland, Frederick V, King of Denmark and Norway, Adolphus Frederick, King of Sweden, and many other lesser lights. In the list of famous people whom he treated are princes and princesses, dukes and duchesses. He announces that in the thirty years of travel he had treated over 80,000 patients. He speaks of one of his important cases in the person of a man who seems nearer to us than the princes and dukes and the like—of Handel, of whom he says: "I once thought to have had the same success, having all circumstances in his favor, motions of the pupil, light, etc., but on drawing the curtain we found the bottom defective."

It is hardly necessary for us to call attention to the fact that the Chevalier was a knave. This is abundantly shown in all of his career. In a few places he is honest enough to point this fact out clearly, as, for example, where he relates the story of his preparing to marry a dying old woman for her money, and how the plan failed when the fact was exposed that he already had a wife.

The Chevalier, always thrifty, pursued one plan when he finally located in England, which the modern quacks do not use, and which appears to have advantages. This plan is brought out in a notice to the reader in the back of the third volume of his "History." He calls attention to the great suffering of the poor in England from eye diseases, and he suggests to the prosperous of the nation that each subscribe two guineas yearly, and that all who do this are entitled to send during the whole year the poor thus afflicted to the Chevalier's son's house in Hatton Garden, where the Chevalier himself will gladly assist.

And now we come to the winter of this charlatan's discontent. The old man evidently planned to finish his days in London, where he proposed practicing with his son, who had become an oculist and a successful one, as is indicated by the fact that he was oculist to the king. Probably the old man had become fond of his grandchildren, as we hear of him playing in particularly high spirits with John Taylor, third, when he was an infant. But his plans miscarried, and he did not die at home at last. Rather a note in the autobiography of his grandson—the one who became oculist to George III—tells us that he died abroad.

And we have to relate that his grandson, in his "Records of My Life," deals this master quack a great blow, for he says that the "Life and Extraordinary History of the Chevalier John Taylor" was not written by his son, but was really written by Mr. Henry Jones, a literary hack of the olden days, partly from the recollection of notes once in the possession of the Chevalier's son, but "almost wholly of his own invention." In this case, the great oration at Oxford was probably not made at all by the "Chevalier," and taking this honor away, little is left of him except of unsavory memory.

New Instrument.

A NEW AND SIMPLE DEMONSTRATION OPHTHALMOSCOPE.*

GEORGE F. SUKER, M.D.
CHICAGO.

This little device which I have constructed, and which is to be attached to the indirect ophthalmoscope as made by the

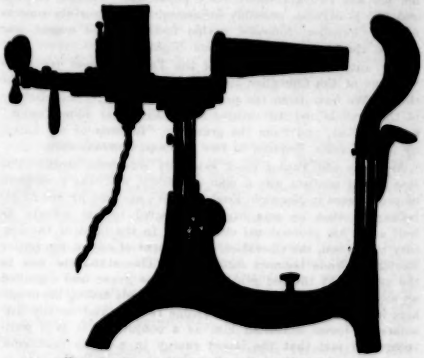

Fig. 1.—The original Geneva ophthalmoscope.

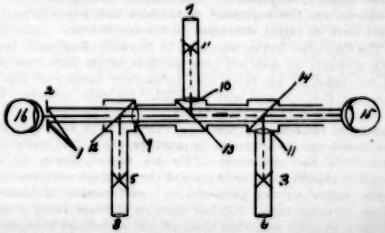

Fig. 2.—Schematic drawing of tubes. 1. Source of light. 2. Mirror (tilting). 3, 4, 5. Indirect images of fundus. 6, 7, 8. Convex lenses to suit observer. 9, 10, 11. Convex lenses, stationary. 12, 13, 14. Plain lenses placed at an angle of 45 degrees to axis of tubes. This gives a reflection of 90 degrees. 15. Patient's eye. 16. Observer's eye.

Geneva Optical Company of Chicago (Fig. 1), is solely intended to simplify the teaching of ophthalmoscopy in the schools. With it, two or three students in addition to the demonstrator can see the same fundus at the same time. The patient's eye is under the direct control of the demonstrator at all times, in that it can follow the movements of the latter's finger.

The chief value of the instrument consists of these points: It is simple; a number of students are able to see the same

* Exhibited before the Section on Ophthalmology of the American Medical Association at the Fifty-fourth Annual Session.

fundus; it can be detached from the original instrument. This allows one to use the original ophthalmoscope without the demonstration attachment.

The accompanying cuts will clearly show the construction of the instrument. The drawing (Fig. 2) plainly shows how the light, which is reflected from the mirror, reaches the fundus

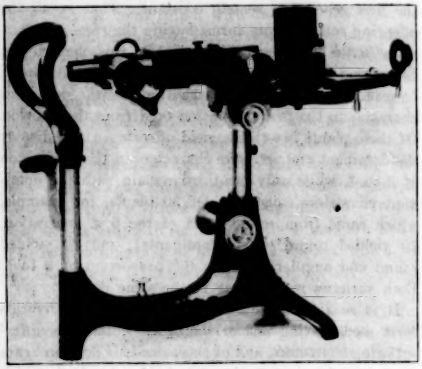

Fig. 3.—This shows the demonstration tubes in their proper position.

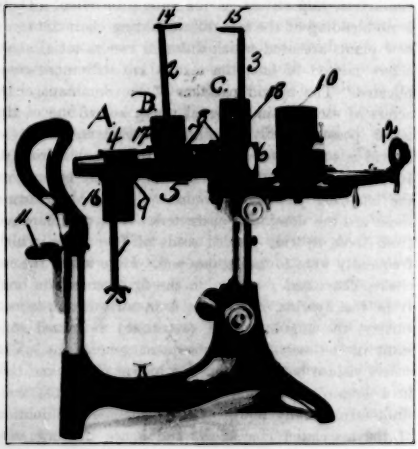

Fig. 4.—Photograph of the original model as shown at the meeting. It simply demonstrates the correctness of the principles involved in a demonstration ophthalmoscope. 1, 2, 3. Telescopic rods. 4, 5, 6. Small square boxes in which are placed slides at an angle of 45 degrees to the axis of the tubes. 7, 8, 9. Strong convex lenses at entrance of tubes. 10. Source of light. 11. Patient's chin rest. 12. Rotating mirror which reflects light into patient's eye. 13, 14, 15. Lens holders. 16, 17, 18. Tubes which open into boxes. A, B, C. The three separate attachments. C is inverted, as can be seen from the other illustration.

of the patient and how the student gets a view of this fundus.

The principles involved are those of indirect ophthalmoscopy and the total reflection of light from a highly polished and thin transparent media acting as a prism in a "camera obscura."

The loss of light intensity due to the numerous reflections is very trivial and does not detract from the clearness of the fundus picture. One gets a very large, as well as a magnified, field of the fundus at each position. There are no interfering corneal or light reflexes at any of the attachments. The examined eye must have a dilated iris, and the student must adjust the telescopic tube with a proper convex lens in the holder to suit his own eye. The instrument is best manipulated in the dark room. Either gas or electric light may be employed.

The instrument is a modification of the principles involved in the original Helmholtz's ophthalmoscope and clearly shows how simple it is to get a multiple image of the fundus.

The instrument which I show you is the original crude model. It is intended to show that the principles involved are correct and that a multiple demonstration ophthalmoscope can be made which is truly serviceable. It will be altered in minor details and more neatly constructed so that it can be more accurately adjusted. At the next session of the Section, I purpose to show a perfectly constructed instrument. This one is shown simply as a matter of record and priority.

103 State Street.

Clinical Report.

REPORT OF A CASE OF COMBINED DIAPHRAGMATIC OR "BIMANUAL MASSAGE OF THE HEART,"

DURING COLLAPSE FOLLOWING CHLOROFORM NARCOSIS.

H. M. COHEN, M.D.
VICTOR, COLO.

A woman, aged 32, perfectly healthy, with the exception of an adherent left ovarian cyst; no lesion of the heart, lungs or kidneys. The operation was for the relief of ovarian pain. The usual central, abdominal incision was made, with the patient in the Trendelenburg position. Chloroform was used because it is the choice of anesthetics at this altitude, 10,000 feet above sea level.

Fifteen minutes after the commencement of the operation the patient, without any previous respiratory, circulatory or pupillary danger signal, suddenly became cyanotic and pulseless, cessation of respiration in this case following and not preceding that of the heart. Artificial respiration was immediately resorted to and continued, and the usual hypodermics administered. After two minutes had elapsed and no reaction had been established, I introduced my left hand into the abdominal cavity, pushed along the anterior abdominal wall until the diaphragm was reached, and, placing the hand, palm upward, in about the position the heart would normally be; that organ was easily grasped through the relaxed and intervening diaphragm. There was an entire absence of heart action. Placing the right hand over the precordial region, externally, I now plainly palpated the heart, as it lay between my two hands. In other words, with the heart grasped between the two hands I was in the novel position for what I shall term "bimanual palpation of the heart." I then began rhythmical compression of the heart, using both hands, at a rate of about sixty times a minute. After about thirty seconds a slight beat was felt by the left hand.

The heart now began slowly to beat, gradually increasing both in strength and rapidity of beat, until at the end of one minute after massage began the beats registered about eighty per minute, and respiration began to be partially re-established. About two minutes after this respiration was normal, pulse eighty and, shock being apparently recovered from, the anesthetic was changed to ether, and the operation finished in about thirty minutes.

At the completion of the operation the patient was in good condition, there being no cyanosis or coldness of the extremities, pulse eighty-six and respiration about normal; consciousness returned in about the usual length of time.

Man's Enemies.—Humanity has but three great enemies, fever, famine, and war, of which by far the greatest, and by far the most terrible, is fever.—Osler.

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MENDEL'S PRINCIPLES OF HEREDITY.

Although it is admitted that a clear understanding of the phenomena of heredity would be of great value in solving many of the perplexing problems of evolution, yet our knowledge of these phenomena has increased but little during the last century. The processes of fertilization and development have been studied in great detail, but we have as yet no idea as to what is the essential agent in the transmission of the parental characters to the offspring. Scientists have, however, begun to study the outward facts of this transmission, and we are gradually beginning to see at least how we ought to go to work at these problems. Among the workers who have contributed most toward the establishment of definite laws of heredity Galton stands perhaps foremost; but there is one other worker of equal prominence whose papers, however, remained unknown to scientists for 35 years after their publication. This investigator is Gregor Mendel, Abbot of Brünn, who carried on experiments in the garden of his cloister over a period of 8 years before any of his conclusions were put in print. His most important papers were published[1] in 1865 and in 1869, but nothing was known about them until 1900, when de Vries drew attention to them in a paper on experiments along similar lines. Mendel's very remarkable memoirs dealt with hybridization of peas, and he laid down in them what is now known as Mendel's principles, or laws, of heredity.

In cross-fertilizing peas having a distinct differentiating character he found that the hybrid character always resembles that of one of the parental forms so closely that the other either escapes observation completely or can not be detected with certainty. Crossing, for instance, peas having round seeds with a variety having angular seeds he got hybrids having only round seeds. Those characters which are transmitted to the offspring in the hybridization he termed the dominant, while those which became latent in the process he designated the recessive characters. The dominant character may come from either the seed-bearing parent, or from the one that furnished the pollen. In the first generation bred from the hybrids not only the dominant characters appear, but the recessive ones also appear with their full peculiarities, and this in the definitely expressed proportion of three to one. Among each four plants of this generation we have, therefore, three with the dominant characters and one with the recessive. No transitional forms were observed in any experiment. In the second generation bred from the hybrids those forms in which the recessive characters reappeared in the first generation remain constant. That is, all the offspring coming from forms having the recessive character in the first generation maintain this character in the second and subsequent generation. It is different, however, with those forms which possess the dominant character in the first generation bred from the hybrids. Of these plants two-thirds yield offspring which display the dominant and recessive characters in the proportion of 3 to 1, while only one-third remain with the dominant characters constant. Of 30 plants, for example, which came from round seeds of the first generation, 10 yielded round seeds (dominants), and 20 yielded round and angular seeds, in the proportion of 3 to 1. Both varieties may appear in the same pod.

It is seen from these experiments that the hybrids form seeds having one or the other of the two differentiating characters, and of these one-half develop again the hybrid form, while the other half yield plants which remain constant and receive the dominant or recessive characters, respectively, in the same proportion. There is no blending of the two differentiating characters. If new plants are used which differ in two essential characters instead of one, the results are still more complicated. The hybrid partakes of the dominant characters of each of the parental types, but if one of the latter possesses only dominant characters, then the hybrid is scarcely or not at all distinguishable from it. In crossing round yellow peas with angular green peas the offspring yields only round yellow seeds, because these are the dominant characters. The plants raised from these hybrids yielded seeds of four sorts, which frequently were found in one pod. Here again the recessive characters reappear in the first generation bred from the hybrids. Of these four sorts of seeds one variety, the angular green (recessive) remained constant in the second and subsequent generations. The others yielded both constant and hybrid forms, and this in a definite proportion of the individuals. The constant forms finally represent every possible combination of the associated characters, and hence the law may be stated briefly as follows: In the second and later generations of a hybrid, every possible combination of the parent characters occurs, and each combination appears in a definite proportion of the individuals.

The fact that constant forms appear in all combinations of the associated characters is very significant. Mendel found by experience that constant progeny is produced only when the egg cells and the fertilizing pollen are of like characters, so that both are provided with material for creating quite similar individuals, as in the case with the normal fertilization of pure species. But since the various constants are produced in one

1. Verh. d. Naturf. Ver. Brünn, 1865, iv. See "Mendel's Principles of Heredity," by Bateson, for translation.

plant, or in one flower of a plant, he concludes that in the ovaries of the hybrids there are formed as many sorts of egg cells, and in the anthers as many sorts of pollen cells as there are possible constant combination forms, and that these egg cells and pollen cells agree in their internal composition with those of the separate forms. And he assumes further that the various kinds of egg and pollen cells are formed in the hybrids, on the average, in equal numbers. The last two statements are, of course, purely theoretical, but Mendel has produced very strong evidence in their favor by means of a complicated experiment in cross-fertilization.

The experiments outlined above have been confirmed with other plants, such as wheat and some species of beans, but contradictions are also encountered. It will now be interesting to see how far these laws are found true in hybridization of animals, a subject which we will consider in a future issue.

INTRACRANIAL TUMORS.

An interesting evidence of the encouragement scientific work in public institutions is receiving is afforded by the anatomic study of intracranial tumors by I. W. Blackburn,[1] pathologist to the Government Hospital for the Insane, Washington, D. C. In the profuse illustrations of this work there is a resemblance to certain famous old atlases of morbid anatomy which have long served as landmarks in medicine; a similar rôle undoubtedly awaits this contribution; it will be valuable for purposes of reference. The large number of black and white, unembellished drawings by Blackburn of microscopic preparations indicate an earnest zeal for this manner of recording observations worthy of hearty commendation. Seventeen of the tumors showed the structure of spindle-celled sarcomas and are designated as "endothelial." They arise from the dura as circumscribed, warty growths, compressing but not infiltrating the substance of the brain. Their slight attachment to the dura has frequently led to the erroneous supposition that their origin was within or from the cerebral tissue. Their location was more commonly the base of the brain, and the ease with which they could be "shelled out" from the surrounding tissues invites surgical intervention for accessible growths of this character with focal symptoms.

Some objections exist to classifying these tumors with sarcomas, and these are recognized in the rather naïve statement that they "can not be classed with any other division of morbid growths, consequently must be placed with the sarcomata or in a class by themselves." The absence of metastatic growths or regional extension, the thickened and hyaline blood vessels they contain and the disposition to undergo fibrous transformation and degenerative changes, especially calcification, are all in marked contrast to the characteristics of malignant tumors; they would denote instead the healing and cicatrizing inflammatory processes associated with large amounts of granulation tissue, or perhaps more closely ally these neoplasms to benign mesoblastic tumors. In two cases their origin from the endothelium of the arachnoid villi was demonstrated. It might not be out of place to suggest the name of "meningeal endothelioma" for this class of growths. The tumor of this sort described by Brower and Wells[2] in 1901 was termed peri-endothelioma after the classification of endotheliomas by Borrmann. In addition to these tumors from the dura, 5 gliomas are described, a "gliosarcoma" and a small round-celled sarcoma. Of 3 tumors in the pituitary fossa, 2 arose from the hypophysis; the third, a cystic growth containing considerable cholesterin, was so altered by retrogressive processes that its origin could not be determined; the hypophysis, however, was not involved in the growth. In none of these cases were there any evidences of acromegaly. In view of the prevalent belief of a connection between this disease and tumors of the hypophysis, these 3 cases form a valuable addition to the few similar observations of growths from this structure without acromegaly. The structure of the tumors in the two cases of true pituitary adenoma does not differ materially from that usually described for tumors of the hypophysis; in one the proliferation had assumed a papillary character. The absence or presence of chromatophilic affinities of the cells in these growths was not determined.

It is possible to conclude from a review of this work that the equipment and facilities for research have not reached, in the Asylum for the Insane in Washington, a stage beyond that attained in some of our state institutions of a similar character. It would have added to the value of the report if the newer methods of technic had been employed in studying these intracranial tumors; their relation to the insanity and the secondary changes in the nervous system are phases connected with their examination on which we may hope to obtain information in the future.

There are scattered throughout this country hospitals for the insane with laboratories either under the charge of a single individual or with forces greatly overwhelmed by the wealth of material, whose efforts and enthusiasm are undirected and handicapped by traditions and financial policy. Notwithstanding these conditions, improvement is occurring slowly in the character of the work done, although greatly delayed by the necessity of educating "boards of control" and politicians to the humanitarian need of assisting scientific investigation in medicine. In some instances this improvement is denoted by lavish expenditures for apparatus and buildings with no provisions for the workers they were designed to accommodate.

The benefits of the thorough organization the profession is now undergoing will be apparent when, through the education of public sentiment, greater improvements

1. A Study of 29 Intracranial Tumors Found in 1,642 Autopsies in Cases of Mental Disease, 1903.

2. Am. Jour. Med. Sc., 1901, cxxii, 32.

are introduced into these laboratories and, through improved direction and co-ordination, more efficient use made of the opportunities they possess for research.

PARAGUAY TEA.

Some months ago a request was made in the *Journal of Tropical Medicine* that some reader in South America give information in regard to maté or Paraguay tea. In response to this it publishes in its October number a communication from a South American resident who points out certain special advantages of this as a stimulant.

It seems to be a fact that the ordinary South American or hybrid South American is not naturally an energetic individual, but under the influence of this physical and mental stimulant the amount of hard work that he can do is hardly limited. The woodmen in the quebracho industry go to the woods between 3 and 4 o'clock in the morning and work steadily for hours on an occasional swallow of maté, only stopping at their noon meal. The correspondent asserts that maté is far superior in its invigorating powers to tea, coffee or cocoa and that it fits one as well for mental as for physical work. It is prepared, as is tea, by pouring boiling water on the leaves, and it should be drunk immediately or sucked through a metal tube, the latter being the preferable way. The stimulating effect of three or four ounces will last for as many hours. The bitter taste is soon tolerated and even relished. The small amount of caffein as compared with tea or coffee is rather notable; less than one-half the amount in tea, and the lack of volatile oils which often disagree with digestion is another point in its favor. The correspondent thinks that from a hygienic point of view maté ought to be preferred to other beverages that contain caffein, as its stimulation is not at all debilitating. In only very rare instances has he ever seen it produce any untoward symptoms. Some very neurotic and neurasthenic individuals bear it badly and have their symptoms aggravated if they take it in excess. He admits that a maté habit may be acquired and may become persistent, though no very evil effects, he says, seem to follow. Taken cold, as is the habit with some of the laborers in South America, it seems to have a bad effect, but since they subsist almost entirely on it for days at a time it is not remarkable that they should be anemic and emaciated. They are, moreover, usually subjects of malaria, and it is claimed that taking cold maté in excess makes them more subject to the malarial infection.

There is some responsibility in suggesting a new stimulant to those who are already suffering from excess of such, but it may be that if Paraguay tea were introduced into this country it would help displace some more harmful drinks. The correspondent concludes his article with a quotation in which he says that "when the old world discovers its error in not utilizing the leaf of the ilex, and shall have found out that yerba maté is the cheapest, most wholesome and tone-giving of beverages, then the ports of Europe will be thrown open to the trade, and its population swell the demand for an article of diet that ranks among the very best." This opinion may be a little too favorable. We doubt whether maté will displace the daily beverage to which we are now accustomed, but it is nevertheless a possible addition to our luxuries.

CONSUMPTION NOT THE ONLY PROBLEM.

In its latest weekly bulletin the Chicago Health Department calls attention to the exaggerated statements that are sometimes made in regard to the prevalence of consumption, quoting one authority whose estimate would require 35 per cent. increase over the figures shown in the last U. S. Census reports, notwithstanding the fact that there has been a steady decrease all these years in the mortality from phthisis. This is only one instance of the exaggeration in which good men allow themselves occasionally to indulge when speaking of a subject in which they are strongly interested. Consumption is a scourge, but it does not follow that its evils should be overstated. A review of the consumption mortality in Chicago during the last half of the nineteenth century shows a decrease of over 40 per cent. in the ratio of mortality, at the same time that there is a 53 per cent. increase in the mortality from pneumonia since the beginning of the last decade of the nineteenth century. During the past few years the pneumonia mortality—though its excess is largely confined to about seven months of the year—has annually exceeded the total of deaths from consumption and there is a continued increased percentage of deaths from this cause. We can not credit the whole of this, as THE JOURNAL has long ago pointed out, to influenzal infection which has been rampant during the past ten or eleven years. We have other problems, therefore, beside that of consumption and which at present seem even more serious.

DANGER FROM SLEEPING CARS.

Apropos to the question of consumption we may refer to some statements made at the recent meeting of the American Public Health Association[1] in regard to the hygiene of railroad traveling, and especially of sleeping cars. One speaker said that the official investigation of a state board of health disclosed the fact that the blankets used in these conveyances were only cleaned once in every six months. Considering this in connection with the additional fact that was pointed out by another speaker that consumptives are constantly traveling on these cars, the matter becomes a serious one. There is no question that the chances for acquiring consumption are increased by modern luxuries of travel. The only consolation we have is that we have been taking these chances for many years without any appreciable harm, since consumption is apparently on the steady decrease, at least as regards its mortality, if not its incidence. This is no reason, however, for neglecting sanitary precautions, and we trust that railroad organizations, the Pullman Company and others that are re-

1. See Society Proceedings, page 1157.

sponsible for the present condition of things will bring about the changes that are needed to insure the safety of the traveling public.

POLITICAL CONTROL OF PUBLIC INSTITUTIONS.

We have troubles of our own, but there is sometimes, perhaps, a little disreputable satisfaction in knowing that others have them, too. The political management of public institutions in this country has become so patent an evil that we have almost reached the point where we accept it as inevitable. In some states the political patronage theory most seriously affects the usefulness of public charitable institutions and yet politicians can not be induced to give up what they consider their perquisites. This evil, however, exists elsewhere, and it is evidence of company in our misery to read in the *Intercolonial Medical Journal of Australasia* that the authorities there are practically the same in their methods and ideas as here. Our confrère says: "Whenever anyone attempts to overturn the belief that political patronage is the beneficial system of administration the commotion is sure to be active and immediate," and this is in reference to the stand taken by the chief secretary of the Colony of Victoria. Even in Great Britain influence may vitiate the choice of officers as in the case of one asylum a few years ago in the southern portion of the island. Nevertheless, we believe that we have been, and are, more afflicted with political control of charitable institutions than almost any other people—perhaps excepting some of the British colonies. The medical press and the medical profession have been too quiet about the matter, and it is time we used our influence as a profession to help bring the needed reform.

THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE.

This is one of the largest medical libraries in the world, and in many respects the best. The collection at the present time consists of about a quarter of a million medical books and pamphlets, of which 149,000 are bound volumes. One of the most important functions of the library is the preparation of its "Index Catalogue," of which one volume appears yearly. The first series of sixteen volumes, covering the entire alphabet, was completed in 1895, and the latest volume of the second series, recently published, completes all entries under the letter K. Although based on the Library of the Surgeon-General's Office, this unique work is practically an index of the medical literature of the world as published in book form and in journals. Both authors and subject-matter being indexed, it is available as a working catalogue in any large library, general or medical, and is so used in all civilized countries. This work is unique in the domain of medicine, of which it includes all branches, and in no other science or profession is the special literature indexed on the same large scale and in the same comprehensive way. The Index Catalogue is issued to public libraries and to important medical schools and societies. It is thus made as generally available to the medical profession of the country as the limited number of copies furnished will allow. Books are lent to individuals on the application of recognized libraries, assuming responsibility for their return, or if no library is available the loan is made subject to a money deposit to cover possible loss. In all cases express charges must be paid by the borrower. Rare volumes which could not be replaced in case of loss are not lent, but the great mass of literature in the library is thus put within the reach of the medical profession, to whom this excellent collection should be a source of legitimate national pride.

PRELIMINARY QUARANTINE.

Elsewhere in this issue is a communication from a correspondent containing a suggestion that, simple as it appears to be, seems worthy of attention. We all know the difficulties of diagnosis in the beginning of many infectious diseases. Diphtheria and scarlet fever are often hardly distinguishable from other conditions that are comparatively innocuous and that do not require any notification. The difficulty of diagnosing smallpox in its early stages is well known. Typhoid fever is often difficult to recognize in its incipiency. Nevertheless, it is not always possible to say when the danger of infection from these diseases begins, and the earliest warnings that can be given are advisable. The inconvenience, to say the least, of quarantining a house is such that it is advisable, where practicable, to be sure it is necessary before inflicting a home with a quarantine card. Our correspondent suggests, in cases in which there is a reasonable suspicion of a contagious disease, but in which the exact type is not yet ascertainable, that simply a notice of an infectious disease without any specification as to its nature be posted. While the idea is not a new one, having been carried out in some places, it is worth wider attention than it has received. We would amend our correspondent's suggestion by advising a card reading, "Quarantine, Probably Infectious Disease Here," to avoid the absolute declaration of infection until the diagnosis is sure. When the true nature of the disease is ascertained the attending physician could remove the card, and replace it with the one called for by the disease, or remove all quarantine if the disease proved to be non-infectious. Probably more hard feelings arise among physicians over the diagnosis of suspected cases of contagious and infectious diseases than over any other cause. If a preliminary quarantine notice would materially lessen this—and it seems that it would—here is one strong argument in favor of the measure. In some cities a card is used reading: "Quarantine"—in large letters —"Contagious Disease Here"—in smaller letters—thus suggesting that quarantine is the principal fact for notice and that it is not necessary to publish abroad details as to which particular type of contagion is represented. This would exclude the trespasser who boldly approaches a house labeled with a disease from which he has already suffered and of which he consequently has little fear, regardless of the danger of his example or of carrying the germs elsewhere. Such a card might be used for all quarantine and the exact diagnosis left to the attending physician. If a preliminary quarantine card is used, the public will be further educated on the important fact that certain diseases can not be distinguished in their incipiency.

Medical News.

ILLINOIS.

County Aids Sufferers.—The public service committee of the county board has set aside $2,000 to be used as an emergency fund for the relief of smallpox sufferers at Lemont.

Charged with Murder.—Two guards at the Illinois Hospital for the Incurable Insane, Bartonville, who are charged with having brutally beaten and abused an insane patient so that he died, have been held without bail to the grand jury, which convenes November 9.

Corrosive Sublimate for Calomel.—It is reported in the daily press that a baby in Mattoon recently died from poison. The mother took the child to the office of a physician, who, intending to give her calomel, gave her tablets of bichlorid of mercury. At the inquest the physician confessed his mistake and was exonerated by the jury.

Smallpox in Will and Cook Counties.—Dr. Elvin F. Baker, Jacksonville, inspector of the State Board of Health, after careful investigation, reports that there are 250 cases of smallpox in Dupage Township, Will County, and in Lemont Township, Cook County. The supervisors of both townships have agreed to establish a strict quarantine.

National Guard Medical Officers Meet.—The Illinois Association of Military Surgeons met, October 31, at Rush Medical College. The morning session was devoted to reports and papers; in the afternoon Professor Senn gave a clinic, and in the evening the members of the association were his guests at a dinner at the Chicago Athletic Club. Col. N. Senn, surgeon-general, was re-elected president; Major Thomas J. Sullivan, surgeon Seventh Infantry, vice-president, and Major Charles Adams, surgeon First Infantry, secretary-treasurer.

Chicago.

Personal.—Dr. and Mrs. Llewellyn F. Barker sail, November 7, for Europe, on the *Lahn*.——Dr. and Mrs. Andrew M. Harvey are spending a few weeks in the south.

Increase in Infectious Diseases.—Diphtheria continues to increase—23 per cent. in the last fortnight—and scarlet fever fully 60 per cent. comparing the last half with the first half of the month. Three cases of smallpox were removed to the Isolation Hospital—all from Lemont and none vaccinated.

For New Laboratory Superintendent.—An original entrance examination will be held by the civil service commission, November 17, for superintendent of the city laboratory to succeed Dr. William K. Jaques, instead of filling the office from the eligible list of medical inspectors. Dr. Wynekoop will be in charge temporarily.

Mortality for the Week.—Of the total 473 deaths reported for last week, 63 were due to pneumonia, 52 to consumption, 48 to heart disease, 37 to Bright's disease, and 36 to violence. The death-rate for the week was at the rate of 13.07 per 1,000. This is higher than during either the previous week or the corresponding week of last year.

Dr. Frank Billings' Illness.—The many friends of Dr. Billings will be sorry to learn that it became necessary for him to submit to a second operation. He was doing well until a slight hemorrhage developed about 15 days after the operation, which finally became so severe that it was necessary to reopen the wound. Since the operation, which occurred October 31, there have been no more hemorrhages and the patient is doing well.

October's Deaths.—The total 1,962 deaths from all causes reported during October furnish an annual rate of 12.25 per 1,000. This is 13.6 per cent. less than the average October rate of the previous ten years, which was 14.19. With one exception it is the lowest October rate on record. There were 282 more deaths of males than females—an excess of 25 per cent. The 195 pneumonia deaths—almost 10 per cent. of the total—is unusual for October, and is ominous for the future, says the department of health.

Dr. Stevenson Critically Ill.—Dr. Sarah Hackett Stevenson, one of the most eminent medical women of America, and prominent not only in medical circles, but in all work for women, suffered a cerebral hemorrhage while in her office, October 30. She was taken to Augustana Hospital, and thence, on November 3, to St. Joseph's Hospital. She is completely paralyzed, and it is feared that the paralysis may be permanent. The Medical Woman's Club announces that the banquet which was to have been given in the honor of Dr. Stevenson, November 14, is indefinitely postponed.

INDIANA.

Infectious Diseases.—Typhoid fever is said to be raging at Goshen.——Lafayette has 18 cases of smallpox, all of mild type.——Dr. Seth R. Melton, Fontanet, reports 75 cases of smallpox in that town and its vicinity.

September Deaths.—The total number of deaths reported was 2,766, an annual rate of 13.4 per 1,000. In the corresponding month last year 2,812 deaths were reported, a rate of 13.6. In the preceding month there were 2,933 deaths, rate 13.7. By important ages the deaths were: Under 1 year, 519; from 1 to 5 years, 245; from 5 to 10 years, 65; from 10 to 15 years, 66; 65 years and over, 557. Some important causes of death were as follows: Tuberculosis, 347; typhoid fever, 166; diphtheria, 35; croup, 3; scarlet fever, 15; measles, 6; whooping cough, 5; pneumonia, 110; diarrheal diseases, 265; cerebrospinal meningitis, 35; influenza, 3; puerperal fever, 12; cancer, 92; violence, 184; smallpox, 2. The city death rate was 16.4 and the country death rate 11.8 per 1,000. The death rates of the cities having over 25,000 were: Indianapolis, 17; Evansville, 14.8; Fort Wayne, 14; South Bend, 17.2, and Terre Haute, 17.6 per 1,000.

Disease Prevalence in September.—Typhoid fever stood first in area of prevalence, as was also the case in the preceding month. Deaths occurred in 66 counties, there being a total of 166. Diarrhea was second in area of prevalence, as was also the case last month. Tonsillitis and bronchitis were more prevalent than they were in the preceding month. There were 68 cases and 2 deaths from smallpox in 16 counties. This is a decided drop as compared with the preceding month, also compared with the corresponding month last year. It is likely that all the cases were not reported, for it has appeared in the last few days in Clay County, among children, and was diagnosed as chicken-pox. The order of prevalence of diseases was as follows: Typhoid fever, diarrhea, tonsillitis, rheumatism, bronchitis, intermittent fever, dysentery, cholera morbus, scarlet fever, cholera infantum, pneumonia, inflammation of bowels, diphtheria, measles, pleuritis, influenza, erysipelas, whooping cough, puerperal fever, meningitis.

Personal.—Dr. and Mrs. Hamilton Wolfe, New Albany, recently celebrated the sixty-fourth anniversary of their marriage.——Dr. John Z. Powell, Logansport, has been placed in charge of the National Home for Disabled United States Volunteer Soldiers at Johnson City, Tenn.——Dr. Seymour C. Wilcox, New Albany, recently celebrated his eighty-fifth birthday.——Dr. Marshall Varble, Jeffersonville, has been operated on for appendicitis at Norton Infirmary, Louisville.——Dr. James W. Estes, Arlington, suffered a loss of $600 by a fire in which his instruments, office furniture and medicines were destroyed.——Dr. Walter R. Francis has resigned as treasurer of the Marion Hospital.——Dr. and Mrs. John M. Kitchen recently celebrated their golden wedding in Chicago.——Dr. Kent K. Wheelock, Fort Wayne, has sailed for Europe.——Drs. Ernest C. Reyer, Albert C. Kimberlin, and Thomas E. Courtney have been appointed members of the Indianapolis Board of Health.——Dr. Mavity J. Spencer, Indianapolis, has been appointed secretary of the board of health and city sanitarian.——Dr. Joseph D. Cain has been appointed superintendent of the city dispensary, Indianapolis.

IOWA.

Smallpox.—At Quincy 30 cases are reported, at Corning three cases have occurred, and at Runnells there have been 20 cases in the last month.

Personal.—Dr. John C. Rockafellow, Des Moines, has gone to Arizona on account of impaired health.——Drs. Hornibrook have constructed and opened a hospital at Cherokee.

Hospital Association Organized.—The Atlantic Hospital Association has been incorporated with a capital stock of $10,000 by Drs. Carlton V. Wilder, Thomas B. Morris, and others to operate a hospital in Atlantic.

Physician Enjoined from Practice.—In the case of Dr. Horace W. Barnard, Emmetsburg, who invoked the aid of the law to prevent Dr. J. C. Davies, whose practice, property and residence he had bought, from practicing again in Emmetsburg, the court has decided that the temporary injunction shall be made permanent, and that Dr. Davies shall not practice in Emmetsburg nor in Palo Alto County.

Lamoni Murder Decision Reversed.—The Supreme Court has reversed the decision of the lower court, by which Dr. J. W. Crofford, Lamoni, was sentenced to twenty years in the penitentiary for the murder of Miss Maude Stone by a criminal operation, on the ground that one of the jurors had expressed an opinion on the case and because of errors in the trial. Dr.

Crofford will accordingly have a new trial. Despite the refusal of the State Board of Medical Examiners to restore his certificate he has continued to practice since his release on bail.

KANSAS.

Typhoid Fever in Kansas City.—An epidemic of typhoid fever is prevailing in a small neighborhood in the central part of Kansas City, where 27 cases are reported.

Personal.—Dr. Claude Mayfield, Hutchinson, has been appointed health officer of Reno County, vice Dr. George R. Gage, resigned.——Dr. George M. Minney, Wichita, has been appointed captain and assistant surgeon, K. N. G., and assigned to Battery B.

Physician Found Not Guilty.—In the case of Dr. Jacob L. Hausman, Marysville, charged with having caused the death of Kate Strohm by a criminal operation, the state failed to produce any testimony against the accused, and the judge instructed the jury to find him not guilty.

License to Stay Revoked.—Dr. Robert E. Gray, Garden City, who was tried in Chicago for the murder of a girl whom he is said to have taken to that city to have a criminal operation performed, and whose license was revoked several months ago by the State Board of Medical Registration and Examination on the ground of his immoral character, has been refused a rehearing by the board.

MARYLAND.

Bequests.—Dr. William J. Todd, Mount Washington, receives $500 and Dr. Josiah S. Bowen $6,500, by the will of Mrs. Adeline P. Bowen.

Personal.—Dr. Alexander D. McConachie, Baltimore, has been elected professor of materia medica and therapeutics in the Maryland Medical College.

Hospital Society Election.—The first meeting of the Johns Hopkins Hospital Medical Society for 1903-4 was held October 12. Dr. Thomas B. Futcher was elected president and Dr. Charles P. Emerson, secretary.

Compromise Verdict.—The suit for $10,000 for alleged malpractice in an operation for tumor brought against Dr. Edwin B. Claybrook, Cumberland, was decided October 25, by a compromise verdict of one cent for the plaintiff. Dr. Claybrook is a B. & O. R. R. surgeon.

Deaths of the Week.—There were 184 deaths in Baltimore last week, an annual death rate for the colored of 30.43 per 1,000, and of the white of 13.12 per 1,000. There were 6 deaths from typhoid fever, and 20 each from consumption and pneumonia. Diphtheria is on the increase.

New Clinical Society.—The American Society of Clinical Surgery, a new national organization devoted purely to clinical demonstrations, will be organized at the Johns Hopkins Hospital, Baltimore, November 13. The committee in charge consists of Drs. Harvey Cushing, Joseph C. Bloodgood, and John M. T. Finney of the Johns Hopkins Medical School. The society will adjourn in the evening and go to Philadelphia, where several sessions will be held at the University of Pennsylvania and at the University of Pennsylvania hospitals. Dr. George E. Brewer, New York, is provisional president, and Dr. James G. Mumford, Boston, secretary. The aim of the society is to stimulate its members in original thought and research, to develop and improve methods of surgical teaching and to promote good fellowship among its members. A small membership and semi-annual meetings are proposed.

NEW YORK.

Personal.—Dr. Henry D. Didama, Syracuse, who underwent an operation October 25, is reported to be improving.

Cornerstone Laid.—The cornerstone of the new St. Luke's Hospital, Utica, was laid on October 17. Mr. and Mrs. Frederick T. Proctor, Utica, have given the site for the hospital and will build and equip it, and the whole will represent, when finished, an outlay of nearly $200,000.

Notice of Examinations.—The State Civil Service Commission will hold examinations for the positions of superintendent and resident physician in the New York State Hospital for the Treatment of Incipient Pulmonary Tuberculosis, Nov. 28, 1903, in various cities throughout the state. Intending competitors must fill out application blanks and file them in the office of the commission before noon of November 23. Applicants will be duly notified of the time and place of examination. Non-residents of the state will be admitted. The requirements and conditions of examination are as follows:

Medical Superintendent.—Probable salary, $3,500 a year, with quarters and maintenance for the superintendent and his family. The duties of the position are defined by Chapter 416 of the Laws of 1900, which further provides that such medical superintendent shall be a well-educated physician, a graduate of a legally chartered medical college, who has had at least six years' actual experience in the practice of medicine, including at least one year's experience in a general hospital.

Resident Physician.—Probable salary, from $900 to $1,500 a year, with quarters and maintenance. Duties to be prescribed by the medical superintendent, under the direction of the board of trustees. Candidates must be regularly graduated physicians and have had at least two years' experience in the practice of medicine, including one year's actual experience in a general hospital.

For full particulars, application blanks, etc., address Chief Examiner, State Civil Service Commission, Albany.

New York City.

Another Convalescent Hospital.—It is announced that a hospital for convalescents will soon be opened in connection with Lebanon Hospital.

Personal.—Dr. Louis Stern and wife were badly hurt by being pinned down by their automobile which was thrown into an unguarded excavation.

Resolutions on Dr. Pilgrim's Death.—The faculty of the New York School of Physical Therapeutics has adopted resolutions eulogistic of its departed associate, Dr. Maurice Fischer Pilgrim.

St. Luke's Hospital Report.—The managers of the hospital report that during the past year, ending with St. Luke's Day, there were treated in that hospital 2,642 persons, and that the expenditures exceeded the receipts by $32,166.81.

Lectures on Skin Diseases.—Dr. L. Duncan Bulkley will give a course of clinical lectures on diseases of the skin to the medical profession at the New York Skin and Cancer Hospital, on Wednesday afternoons at 4:15, commencing November 4.

Larceny of Hospital Supplies.—On complaint of the charities commissioner an attendant in the King's Park Insane Hospital, formerly employed in Bellevue Hospital, was arrested on the charge of having stolen from the hospitals of the department, bandages and other surgical supplies worth $4,000.

Druggist Not Responsible in Counter Prescribing.—The appellate division of the New York Supreme Court handed down October 30 an important decision regarding the legal liability of druggists for injuries received by patients whom they see fit to treat. The plaintiff alleged that he had received a slight cut on his thumb and that a drug clerk bandaged the wound and instructed him to keep the dressing wet with a carbolic lotion; that he had put five or six drops of the acid on the bandage, with the result that blood poisoning set in, necessitating the amputation of the thumb. The defense was that druggists were not permitted, under the law, to practice medicine or surgery, and that the plaintiff was guilty of contributory negligence. This contention was upheld both by the trial court and the appellate court.

OHIO.

Hospital Incorporated.—Mercy Hospital, Columbus, has been incorporated with a capital stock of $60,000.

Colored Hospital.—The Peter Fosset Memorial Hospital for colored people took corporate form October 8, when its board of trustees took formal charge. The hospital contains about twenty beds. Such a hospital has been much needed inasmuch as very few of the hospitals of Cincinnati accept colored people. The active staff is as follows: Drs. E. Duval Colley, Norval C. Vaughan, W. A. B. Kerr, Louis A. Cornish, and James C. Erwin.

Personal.—Dr. Benjamin F. Lyle, Cincinnati, has been made director of the bureau for the free examination of consumptives.——Dr. Herbert Bacon, Bloomville, has suddenly become totally blind.——Dr. Theodore W. Rankin, Columbus, has returned from abroad.——Dr. Carl Hiller has been appointed bacteriologist of the Cincinnati City Hospital, vice Dr. Albert B. Devers, resigned.——Dr. James Donnelly and family, Toledo, have returned from Europe.

New Sanitary Code Proposed.—A new sanitary code largely extending the powers of the Columbus Board of Health has been proposed by Dr. W. T. Howard, Jr. Under this code the board will be given enlarged power to control communicable diseases, the sanitary conditions of schools, factories, dwellings, offices, public buildings and vehicles, the protection of foods and the abatement of nuisances. Residences will be more strictly placarded and disinfected. District physicians will report on the cleanliness of school buildings. Teachers will be instructed in the symptoms of children's diseases. The New York rules have been adopted for controlling tuberculosis. The sale of rubber tubes for nursing bottles will be prohibited.

The Colleges.—The medical colleges of Cincinnati open this fall under slightly changed conditions. The medical department of the University of Cincinnati (Medical College of Ohio) opens with conditions unchanged except for additional equipment, and has registered about the same number of students as last year. The Miami Medical College has absorbed two minor colleges during the past year. One year ago the Cincinnati College of Medicine and Surgery closed its doors and a large part of the faculty went to Miami. During the past summer the Laura Memorial College, a woman's school, has been directly transferred to the Miami. The laboratories of the Laura Memorial College were well equipped and will be used by the Miami for teaching. The teaching privileges at the Presbyterian Hospital are transferred with the college. The attendance at the Miami will probably equal that of last year.

PENNSYLVANIA.

New School Book Committee.—As a committee for the examination of school text-books for the Pennsylvania State Medical Society the following have been appointed: Drs. Andrew B. Brumbaugh, Huntingdon; John W. Ellenberger, Harrisburg; Edgar M. Green, Easton; Edward Stieren, Pittsburg; and S. Solis-Cohen, Philadelphia.

The Allegheny Quarantine Matter.—The friction between the State Board of Health and the health officials of Allegheny in regard to dealing with the smallpox situation, has probably ended by the local authorities adopting the measures insisted on by the state board. There will likely be no general quarantine of the city, but quarantine will be vigorously carried out where found necessary, and reports of the condition will be made regularly to the state board.

Philadelphia.

Diphtheria is Prevalent.—There were 94 new cases of diphtheria for the week ended October 31 and 22 new cases of smallpox. Typhoid fever has materially decreased, there being 69 new cases for the week.

College and Hospital Personal Mention.—Dr. John H. Gibbon has been made one of the surgeons to the Pennsylvania Hospital to fill the vacancy made by the death of Dr. Thomas G. Morton.——Dr. Judson Daland, for 21 years a member of the faculty of the University of Pennsylvania, has been elected professor of clinical medicine of the Medico-Chirurgical College, to succeed Dr. William E. Hughes, resigned.

GENERAL.

The National Association for the Study of Epilepsy and the Care and Treatment of Epileptics held its third annual meeting at Philadelphia November 5.

Writers on hematologic topics, according to a letter we have received, are asked to send two reprints of their articles or two numbers of the corresponding journals to Charles E. Simon, M.D., American editor of the *Folia Hæmatologica*, 1302 Madison Avenue, Baltimore, for the purpose of review in that journal. In the place of reprints, authors' abstracts will also be received, and can be published immediately after, or coincidently with, the appearance of the original.

New Naval Titles Asked.—Surgeon-General P. M. Rixey, U. S. Navy, in his annual report calls attention to the lack of military rank in the titles now given the medical officers of the Navy and to the lack of dignity when the titles are compared with those of civil life or of other military services. He recommends titles which show both the rank and the grade, as follows:

> In place of surgeon general, surgeon admiral, and in the other grades, medical director to become surgeon captain; medical inspector, surgeon commander; surgeon, surgeon lieutenant commander; passed assistant surgeon, surgeon lieutenant, and assistant surgeon, surgeon lieutenant, junior grade.

Surgeon-General Rixey declares there is necessity for the thorough upbuilding of the Naval Medical School. He advocates the complete renovation of all naval hospitals in need of it. He recommends the building of a new hospital on Seavey's Island, Portsmouth, N. H., at least remodeling of the hospital at Chelsea, Mass.; and the enlargement of the hospital at Pensacola sufficiently to accommodate the sick of the fleets which maneuver in the Caribbean each winter. He asks that two hospital ships be authorized on plans evolved from the experience with the *Solace*, each to cost $1,630,000, and recommends a naval sanitarium for the cure of tuberculosis.

The Craig Colony Prize of $200 is offered by Dr. Frederick Peterson for the best original essay on the etiology, pathology and treatment of epilepsy. The conditions to be complied with are that the paper must show original research work; the subject-matter must be original; the paper must be accompanied by a sealed envelope containing the name and address of the author and bearing on the inside a motto or device, which is also to be inscribed on the essay; the manuscript must be in English and be sent to Dr. Peterson at 4 West 50th Street, New York, before Sept. 30, 1904. The successful manuscript becomes the exclusive property of the Craig Colony.

The Alvarenga Prize for 1903 has been awarded to Dr. William S. Carter, Galveston, Texas, for his essay entitled: "The Relation of the Parathyroids to the Thyroid Glands." Dr. Thomas R. Neilson, secretary, informs us that the College of Physicians of Philadelphia will make the next award of the Alvarenga Prize (being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about $180) on July 14, 1904. Essays may be on any subject in medicine, but can not have been published, and must be received by the secretary of the college by May 1, 1904. Each essay must be sent without signature, but marked with a motto and be accompanied by a sealed envelope having on its outside the motto and within the name and address of the author.

CANADA.

St. Boniface Hospital Addition.—A four-story addition to this hospital at Winnipeg, to cost $100,000, will be built.

Jubilee at Queen's University.—The medical faculty of Queen's University, Kingston, Ont., celebrated its jubilee, October 16, by the opening of a new physiologic and geologic building.

Tuberculosis Sanatorium for British Columbia.—The Ministerial Association of Vancouver desires a sanatorium in British Columbia, and a provincial association for the handling of tuberculosis will be formed.

Toronto Dispensary.—Last year about 13,000 of the sick poor of Toronto were here treated. The dispensary has quite outgrown the accommodation and equipment of the present building, and an appeal has been made for funds for the erection and equipment of a new building next spring.

Infectious Disease Circular in British Columbia.—The Health Department of British Columbia will distribute leaflets containing information on common infectious diseases among the school children. The object is to make the parents more familiar with these diseases. A daily report from the teachers regarding pupils absent through illness will be required whenever disease is prevalent or on the increase.

Personal.—Dr. J. C. Connell has been appointed dean of the medical faculty of Queen's University, Kingston, Ont., in succession to the late Dr. Fife Fowler.——Dr. William Bayard, St. John, N. B., has resigned from the chairmanship of the New Brunswick Board of Health. Dr. Bayard has for more than 40 years been active in board of health matters in that province, and is one of the oldest practitioners in Canada.——Dr. R. Tait McKenzie of the anatomy department of McGill University, Montreal, has been appointed chairman of the Canadian Committee for the St. Louis World's Fair Olympic Games.

A New Western Hospital for Montreal.—At the quarterly meeting of the board of governors of the Western Hospital, Montreal, held last week, it was stated that a new hospital would probably be erected in the spring and that it would provide good accommodation for at least 100 patients. The building would cost in the neighborhood of $100,000. The report of the medical secretary showed that 146 patients had been received into the ward during the past quarter while 1,941 consultations had been given in the outdoor department. The treasurer's report showed the finances to be in a satisfactory condition.

FOREIGN.

The Picture Postal Card in the Hospitals.—The Paris authorities have originated the idea of allowing each hospital to print a set of ten picture postal cards illustrating the various services and scenes in the hospitals. They are to be sold by the doorkeeper for the benefit of the sick.

Official Endorsement of the Biologic Blood Test.—Austria formally adopted, some time ago, this biologic method for forensic cases, and made arrangements for the production of the prepared serum for the purpose. Prussia has followed this example and recommends that this test should be used in forensic cases to supplement and complete others. Four stations have been appointed for the production of the serum and the carrying out of the tests, including the Institute of Hygiene at Greifswald, the Institute of Experimental Therapy at Frankfurt, and the Institute for Infectious Diseases at Berlin.

Some Statistics of Fatal Illnesses.—The physicians in Bavaria have been instituting an inquiry as to the number of persons without medical attendance in their last illness. They find that in a large part of the country a physician was summoned in less than half of the cases of illness that terminated fatally and in certain districts only 10.5 per cent. of the fatal cases had any medical attendance. The proportion is larger in the cities. In Baden 71.3 per cent. had had medical attendance and in Mosbach 62.1 per cent. Only 51.7 per cent. of the children under one year had had medical attendance during their last illness, but the proportion rises to 91.9 per cent. in cases of children more than a year old.

Novel Application of Drunkards as Object Lessons.—The cable states that the friends of temperance in the Russian city of Kieff have installed warm, comfortably-equipped halls in three different quarters of the town to which the police have orders to carry persons found intoxicated in the streets. Each hall is divided into two sections, one for men, the other for women. They are under the control of a physician, who sees that the "guests" are properly attended to until they become sober, when they are liberated. These halls are open to the public at all hours, the theory being that nobody but a confirmed drunkard will risk being seen by his townsmen lying drunk in a public hall. The halls have been in use a month and have sheltered intoxicated persons. The average time required for becoming sober was ten hours.

Vital Statistics in Germany.—The German government has recently published the statistics of the causes of death during the last twenty-five years in the empire. All diseases show a remarkably reduced death rate except certain gastro-intestinal affections. The general mortality has been reduced from 26.73 per 100,000 to 20.46. The average per five years of the deaths from tuberculosis has been reduced from 357.7 to 218.7; acute respiratory affections, from 308.6 to 258.5; typhoid and gastric fevers, from 43.6 to 10.4; diphtheria and croup, from 99.8 to 31.1; puerperal fever, from 14.4 to 5.1. On the other hand, the mortality of the acute intestinal affections, dysentery, etc., has increased from 264.1 to 287.8. The number of viable children born has also diminished. This higher mortality from gastro-intestinal affections is an actual retrogression, the report concludes, and attributes it to the increased participation of women in wage-earning occupations. The more women who enter industrial life the larger the number of infants who are deprived of breast milk. The above statistics apply only to towns of 15,000 inhabitants or over. Fuller details are quoted in the *Allg. Med. Ct.-Ztg.*, October 17.

A Warning to Wealthy Parents.—Under this heading reference was made last week to a sensational case of sadism in which the victims were the two sons of a wealthy Berlin banker entrusted to a private tutor. It seems that a Berlin neurologist had been briefly consulted by the mother, who commissioned him to go and visit her sons in the country to see if a course of suggestive treatment would be advisable to supplement the corporal punishment which the tutor applied in moderation with her consent to break them of long-established habits of masturbation and untruthfulness. He had asked for consultation with a specialist. The neurologist, therefore, visited them once and saw nothing suspicious—physical examination was not allowed by the tutor, who feared it might detract from his authority, and the neurologist had been particularly cautioned not to do or say anything to offend the highly prized and very sensitive tutor. The boys complained only of sleeplessness. The neurologist advised abandonment of corporal for psychic measures, and that a specialist should be sent down every month to inspect their progress. Even when the tutor was under observation for weeks in an asylum after his arrest, his appearance and behavior suggested nothing abnormal.

Battle of the Clubs in Germany.—The physicians connected with the medical aid insurance societies in Germany have resigned in a body at so many places that the advertisements warning outside physicians not to negotiate with the societies without consulting the undersigned, have become so numerous that they are now condensed into a single display ad in our German exchanges. Twenty-five towns are specified, and the name of the local representative of the *Leipziger Verband* is signed to each. The *Verband* announces that it will impart information at any time free of charge in regard to vacancies, medical assistants wanted and other matters of practical interest, with advice as to desirable points to locate in, etc. Our exchanges also comment with pleasure on the successful outcome of the negotiations between the medical officers and the societies at many points, thanks to the united stand taken by the profession. We note that the names of Gera and Mühlhausen are still advertised as points where the strike is still on, the particulars of which have been mentioned in these columns from time to time. The societies resort to numerous tricks to contract with outside physicians, the latest being to conceal both name and place in advertising, and have the mail addressed to the office of the advertising journal, sending a man to confer with the applicant at his home. Our exchanges no longer accept unsigned ads of this kind unless the writer is personally known to them.

LONDON LETTER.

The Sanitation of India.

An elaborate report on the sanitation of India in 1901 has been issued. The population amounted to 293 millions, showing an increase of 1.3 per cent. on 1891, but in several districts there was a considerable decrease. A marked relation was found between decreased population and diminished rainfall. The decennium included 2 famine years and cholera and plague were exceptionally prevalent. The decennial birth rates and death rates showed great variations; the highest provincial birth rate was 50.5, the lowest 14.67; the highest death rate was 119.9, the lowest 15.9. Cholera caused 4½ million deaths during the decennium. In 1901 the birth rate for the whole of India was 34.7, against 36.6 in 1900. The fever mortality was low, being 18.7 against 22.8 in 1900. The cholera death rate was low, 1.20, against 3.70 in 1900. The smallpox death rate was 0.40. It is estimated that about 33 per cent. of the children born are vaccinated. There was a large increase of plague mortality, the deaths amounting to 283,988, against 92,807 in 1900.

Correspondence.

Preliminary Quarantine.

ELMHURST, ILL., Oct. 26, 1903.

To the Editor:—I wish to suggest a plan that I believe, if carried out, would be of great value to the public and at the same time would relieve the physician of a great load of responsibility. It is difficult in the incipiency of many infectious diseases to establish a positive diagnosis. Measles, rötheln and scarlet fever are at times confused, as are tonsillitis and diphtheria, chicken-pox and smallpox. It is often difficult to establish a strict quarantine in these doubtful cases. The public, in general, has a wholesome dread of placarded houses, and the strict isolation of the patient would be fostered if in every infectious disease the house be placarded with a sign like the following: "Contagious disease here," or "Infectious disease here." This sign could be put up in the beginning of every infectious disease, and in this manner we could quarantine measles, rötheln, chicken-pox, parotitis and tonsillitis. This sign could be supplemented by the other placards of scarlet fever, diphtheria, etc., but this would not be necessary.

HENRY F. LANGHORST, M.D.

Marriages.

WESLEY G. BAILEY, M.D., to Mrs. Walter Elrod, both of Chicago.

ROY E. BROWN, M.D., to Miss Carolyn Hutt, both of Chicago, October 6.

EDWIN ELLIOTT ARMSTRONG, M.D., to Myrtle Demuth, both of Sylvania, Ohio, October 14.

CHARLES M. NODLER, M.D., to Miss Josephine Schnens, both of Denver, Colo., October 5.

JOHN J. MULDOON, M.D., to Miss Johanna Isabella, Dwyer, both of Chicago, October 19.

ARTHUR EMORY SUDLER, M.D., to Miss Louise Painter Gilpin, both of Baltimore, October 21.

EDWIN K. DINGES, M.D., Pekin, Ill., to Miss Margaret Alice Wood of Decatur, Ill., October 22.

FRANK W. LOCKWOOD, M.D., South Bend, Ind., to Miss Florence E. Jenkins of Tecumseh, Neb.

GEORGE H. VERNON, M.D., East St. Louis, Ill., to Miss Maud Cooper of Bradfordton, October 21.

CHARLES W. BURT, M.D., to Miss Jennie Margaret Barr, both of Valley Junction, Iowa, October 28.

FINN. KOREN, M.D., Appleton, Minn., to Miss Benedicta Solberg of Minneapolis, Minn., October 20.

EDWARD EUGENE GILLECK, M.D., to Miss Charlotte Irene Thompson, both of Niagara Falls, N. Y.

HERBERT POLLOCK CRAWFORD, M.D., Crafton, Pa., to Miss Florence Barr of Philadelphia, October 20.

CLAYTON C. PATCHEN, M.D., to Miss Arminta M. Reed, both of Mount Sterling, Ill., at Jacksonville, Ill., October 14.

RUPERT L. TURRELL, M.D., Conneaut, Ohio, to Miss Minnie Wheeler of Windsor, N. Y., at Cleveland, Ohio, October 20.

JAMES CLINTON BALLARD, M.D., U. S. P. H. and M.-H. S., to Miss Luda B. Bowman, both of Natchez, Miss., September 17.

LEE M. FRANCIS, M.D., Pueblo, Colo., to Miss Ethel Mary Waldron of Colorado Springs, Colo., in London, England, October 28.

Deaths.

John K. Lineaweaver, M.D. Jefferson Medical College, Philadelphia, 1861, a member of the American Medical Association, Medical Society of the State of Pennsylvania, and Lancaster County Medical Society, and president of the Columbia Board of Health for many years, died at his home in Columbia, October 16.

George C. Hays, M.D. Medical College of Indiana, Indianapolis, 1876, one of the founders of the Fountain County Medical Society, died at his home in Hillsboro, Ind., October 26, from tuberculosis, after a lingering illness, aged 67.

William R. McMahon, M.D. Rush Medical College, Chicago, 1868, chief surgeon of the Southern Railroad, Louisville Division, for several years, died at his home in Huntingburg, Ind., October 23, from apoplexy, aged 67.

Joseph N. Guerard, M.D. University of Maryland, Baltimore, 1899, a member of the Georgia Medical Society of Savannah, died at his home in that city, October 23, from Bright's disease, after a long illness, aged 28.

Sarah F. Mackintosh, M.D. Woman's Medical College of the New York Infirmary, 1872, died at her home in Asbury Park, N. J., October 19, aged 67. She was a member of the Monmouth County Medical Society.

Jonathan Taft, M.D. University of Michigan, Ann Arbor, 1881, founder and dean of the dental department of the University of Michigan, died at his home in Ann Arbor, October 15, after a short illness, aged 83.

Quincy E. Andrews, M.D. Jefferson Medical College, Philadelphia, 1865, an early settler of the Red River Valley, died at his home, eight miles north of Fargo, N. D., suddenly, from apoplexy, October 22, aged 69.

Benjamin Atkins Harding, M.D. Medical School of Maine, Bowdoin College, Brunswick, 1870, died at his home in Blackstone, Ill., October 21, after an illness of ten days, from influenza, aged 61.

Daniel M. Schaeffer, M.D. College of Physicians and Surgeons, Baltimore, 1890, died from septicemia, after an illness of three weeks, October 21, at his home in Harper's Ferry, W. Va., aged 36.

Robert H. O'Hara, M.D. Jefferson Medical College, Philadelphia, 1865, died at his home in Williamstown, Ky., October 20, from kidney disease, aged 65. He retired from active practice in 1878.

Philip Roberts, M.D. Eclectic Medical Institute, Cincinnati, 1866, died at his home in Richmond, Ky., October 22, from paralysis, aged 70. He was twice state senator from his district.

William E. Waters, M.D., lieutenant colonel and deputy surgeon-general, U. S. Army, retired, died at his home in Washington, D. C., October 27, from acute gastritis, aged 69.

Laban C. Winsor, M.D. Bellevue Hospital Medical College, New York, 1885, died from consumption at his home in Livermore, Cal., October 21, after a long illness, aged 41.

Charles E. Decker, M.D., assistant surgeon U. S. P. H. and M.-H. Service, University of Michigan, Ann Arbor, 1891, died at his station in San Diego, Cal., October 22.

Asa Hopkins Churchill, M.D. Yale University, New Haven, 1867, a member of the Connecticut Medical Society, died at his home in Meriden, October 24, aged 72.

George W. Carpenter, M.D. University of Michigan, Ann Arbor, 1853, formerly of Chicago, died at his home in San Francisco, Cal., October 3, aged 87.

Zaremba W. Waldron, M.D. University of Pennsylvania, Philadelphia, 1871, of Jackson, Mich., died at Ann Arbor, Mich., October 1, from apoplexy, aged 60.

William B. Coyle, M.D. Queen's College, Belfast, Ireland, 1868, an early practitioner of Nelson County, N. Dak., died recently at his home in Lakota.

Benjamin Franklin Payne, M.D. Eclectic Medical Institute, Cincinnati, 1857, died at his home in Steubenville, Ohio, from paralysis, October 22, aged 76.

John W. Brown, M.D. Miami Medical College, Cincinnati, 1873, died at his home in Bailey, Texas, October 7, after a surgical operation.

Rose F. Monnish, M.D. Georgia College of Eclectic Medicine and Surgery, Atlanta, 1882, died at her home in Atlanta, October 16.

Edwin Ashton, M.D. Cleveland Medical College, died at his home in Lima, Ohio, October 21, after an illness of four days, aged 77.

Lafayette Z. Coman, M.D. University of Michigan, Ann Arbor, 1879, died at his home in Boulder, Colo., October 18, from pneumonia.

Henry O. Hearn, M.D. Louisville Medical College, 1894, died at his home in Lexington, Ind., October 23, aged 35.

Emanuel Ridgeway, M.D. Chicago Medical College, 1878, died at his home in Morris, Ill., October 17, aged 71.

Deaths Abroad.

William Johnson Walsham, M.B., C.M., Aberdeen, 1871; F.R.C.S. England, 1875, successively assistant demonstrator of anatomy, demonstrator of anatomy, demonstrator of practical surgery, lecturer on anatomy and lecturer on surgery at St. Bartholomew's Hospital Medical School, London, one of the most eminent teachers of anatomy and surgery in Great Britain, died at his home in London, October 5, aged 56. His work on theory and practice of surgery reached an eighth edition before his death.

George Lawson, F.R.C.S. England, 1857, staff assistant surgeon throughout the Crimean War; surgeon to Middlesex Hospital, London, for 33 years; eminent as a specialist on the eye, and surgeon-oculist to the late queen, died at his home in London, October 12, after an illness of three years, aged 72.

James Robert Wallace, M.D., F.R.C.S., secretary of the Indian Medical Association; editor of the *Indian Medical Record*, died in Calcutta, September 27, after an illness of several months, following a severe attack of pleurisy.

Thomas James Pickburn, M.D. Aberdeen, 1874; M.R.C.S. England, 1876, one of the founders of the Hospital for Sick Children, Sydney, died from angina pectoris, at his home in that city, August 18, aged 57.

Osman F. Hall, M.D. Northwestern University Medical School, Chicago, 1896, a medical missionary in West China, died recently at his post of duty at Chung King, aged 37.

Book Notices.

TEXT-BOOK OF DISEASES OF THE EYE. For Students and Practitioners of Medicine. By Howard F. Hansell, A.M., M.D., Clinical Professor of Ophthalmology, Jefferson Medical College, and William M. Sweet, M.D., Demonstrator of Ophthalmology, Jefferson Medical College. With Chapters by Christian R. Holmes, M.D.; Casey A. Wood, M.D., D.C.L., and Wendell Reber, M.D. With 256 Illustrations, Including Colored Plates. Cloth. Pp. 532. Price, $4.00 net. Philadelphia: P. Blakiston's Son & Co. 1903.

This book is one that will be received with favor by the student and practitioner. It is a plain, clear statement of the principal facts of ophthalmology throughout, with a definition of terms that is clear, a description of conditions and methods that is at once concise and readily intelligible, and is a most satisfactory treatment of its very comprehensive subject. We find some matters here more easily explained with the aid of the illustrations and text than we have found them in some of the other text-books on the subject, and yet there is very little superfluous material. The illustrations are admirable and numerous. We notice certain additions, one of which seems to us a little novel in a work of this kind, though we presume that it has also been included elsewhere, that is, the chapter by Dr. Casey Wood on ocular symptoms in general diseases. The other two contributed chapters by Dr. Wendell Reber and Dr. Christian R. Holmes are also valuable. We

think, however, that perhaps a little more fulness in Dr. Reber's contribution might have been of some advantage; the brevity of the treatment is notable, though the subjects appear to be generally covered. Taken altogether the book is an excellent one and ought to be a success as an aid to teachers and as a ready reference book for general practitioners.

LESSONS ON THE EYE. For the Use of Undergraduate Students. Frank L. Henderson, M.D., Ophthalmic Surgeon to St. Mary's Infirmary. Third Edition. Cloth. Pp. 205. Price, $1.50. Philadelphia: P. Blakiston's Son & Co. 1903.

Henderson has given us a valuable work. It is unique, as it teaches nothing but what the student and the general practitioner should know. No claim is made as to the correction to a fraction which can only be done by a trained specialist. The diseases described are such as do not require the use of the ophthalmoscope. Every teacher of ophthalmology will be pleased to place this work in the hands of his students. The illustrations are finely demonstrated and the work is presented in a very attractive form.

THE AMERICAN POCKET MEDICAL DICTIONARY. Edited by W. A. Newman Dorland, M.D., Assistant Obstetrician to the Hospital of the University of Pennsylvania. Containing the Pronunciation and Definition of the Principal Words Used in Medicine and Kindred Sciences. Pp. 566. With 64 Extensive Tables. Price, Flexible Leather, with Gold Edges, $1.00 net; with Thumb Index, $1.25 net. Philadelphia, New York and London: W. B. Saunders & Co. 1903.

This is a compact, handy and practical dictionary for the physician's office desk, or to place under the buggy seat. It contains practically every term used in medicine with concise definitions.

State Boards of Registration.

COMING EXAMINATIONS.

State Board of Examiners of Alabama, Montgomery, Nov. 1-10.
Oklahoma Medical Examining Board, Enid, Nov. 10.
Committee of the Connecticut Medical Society, City Hall, New Haven, Nov. 10.
Board of Registration in Medicine of Massachusetts, State House, Boston, Nov. 10-11.
State Board of Health of West Virginia, Point Pleasant, Nov. 10, 11, 12.
Nebraska State Board of Health, Lincoln, Nov. 11.
Board of Registration of Medicine of Maine, Augusta, Nov. 11.
Board of Medical Examiners of the State of California, City Hall, San Francisco, Dec. 1.
New Mexico Board of Health, Santa Fe, Dec. 7.
Examining Board of Medical Society of Delaware, Dover, Dec. 8.
Board of the Homeopathic Medical Society of Delaware State and Peninsula, Wilmington, Dec. 8.
Ohio State Board of Medical Registration and Examination, Columbus, Dec. 8, 9 and 10.

Kansas Report.—Dr. O. F. Lewis, Hepler, reports the written examination conducted by the Kansas State Board of Examination and Registration at Topeka, Oct. 13 to 15, 1903; the subjects examined in were 9; questions, 90; percentage, 75; candidates, 32; passed, 28; failed, 4.

PASSED.

Candidate.	Schl. of Pract.	College.	Year Grad.	Per Cent.
260	R.	University Medical College, Kansas City	1899	84
261	R.	University of Iowa	1903	87
262	R.	Northwestern University, Chicago	1903	83
274	R.	Northwestern University, Chicago	1901	85
275	R.	Northwestern University, Chicago	1903	87
263	R.	Kentucky University, Louisville	1903	80
264	H.	Marion-Sims-Beaumont M. C., St. Louis	1902	85
280	R.	Marion-Sims-Beaumont M. C., St. Louis	1899	82
265	H.	"Medical College of Chicago" (?)	1903	85
266	H.	Hahnemann Med. College, Kansas City	1901	82
267	R.	University of Nebraska, Omaha	1903	87
268	R.	University of Medicine, Kansas City	1884	76
269	R.	McGill University, Montreal	1899	77
270	R.	Keokuk Medical College, Iowa	1903	85
271	R.	College of Phys. and Surgeons, Chicago	1895	82
272	R.	University of Tennessee, Nashville	1892	87
273	R.	Jefferson Medical College, Philadelphia	1903	83
274	R.	Bellevue Hospital Med. Coll., New York	1880	83
276	R.	Baltimore Medical College	1903	83
277	H.	Hering Medical College, Chicago	1900	83
281	H.	Hering Medical College, Chicago	1903	85
279	R.	Chattanooga Medical College, Tennessee	1902	75
282	R.	College of Phys. and Surgs., St. Louis	1892	77
283	R.	Hospital College of Medicine, Louisville	1903	84
284	R.	Rush Medical College, Chicago	1903	81
285	R.	Yale University	1876	75
286	R.	College of Phys. and Surgs., Kansas City	1903	81
287	R.	Illinois Medical College, Chicago	1903	81

FAILED.

288	E.	University of Nebraska, Omaha	1903	62
289	R.	Ensworth Med. College, St. Joseph, Mo.	1898	67
290	R.	Keokuk Medical College, Iowa	1902	71
291	H.	Hahnemann Medical College, Chicago	1889	41

The questions asked were as follows:

ANATOMY.

1. Give origin and insertion of the pectoralis major muscle. 2. Name all the muscles attached to the scapula. 3. What structures are severed in amputation of the thigh at the middle third? 4. Give origin and distribution of the pneumogastric nerve. 5. Give the coverings of an oblique inguinal hernia. 6. Give origin and insertion of the deltoid muscle. 7. Give the anatomy of the heart. 8. Give the number and names of the carpal and tarsal bones, respectively. 9. Give origin and distribution of the phrenic nerve. 10. Describe the structures within the eyeball.

CHEMISTRY.

1. What are molecules? 2. Is chlorin combustible or a supporter of combustion, and what occurs when a burning candle is immersed in chlorin? 3. What is nitrogen monoxid? 4. What is the chemical antidote for arsenical poisoning? 5. What is carbon dioxid, and what else is it called? 6. Where and how does sodium occur? 7. Does uric acid occur free in the urine normally. 8. What is the clinical significance of the presence of free uric acid in the urine? 9. Why do urates form deposits in joints and cartilages? 10. What is the reaction of blood during gout?

OBSTETRICS AND GYNECOLOGY.

1. What are the indications for the use of forceps? 2. Conditions requisite for the application of the forceps. 3. Under what conditions would you induce premature labor? 4. What is version? How many kinds are there? Name them. 5. How would you perform each kind of version? 6. How would you treat tumors of the mammary glands in a general way? 7. Give diagnosis, prognosis and treatment of fibroids of the uterus. 8. Give the use of the curette. 9. Give the use of the tampon. 10. How would you treat a case of puerperal eclampsia?

PATHOLOGY.

1. Define gangrene. 2. What is a sarcomatous tumor? Give its pathology. 3. Define chronic gastritis and give its pathology. 4. Give symptoms, etiology, pathology, diagnosis and prognosis of herpes zoster. 5. Give symptoms, etiology and prognosis of erysipelas. 6. Give etiology, symptoms, diagnosis and prognosis of neuritis (multiple). 7. Define lithemia. 8. Define purpura hemorrhagica. 9. Give differential diagnosis of septicemia and pyemia. 10. Describe the pathology of rachitis.

BACTERIOLOGY.

1. Define bacteria. 2. Name one cause of many fermentations. 3. Define germicides. 4. Name four germicides. 5. What does the presence of tubercle bacilli signify? 6. The presence of the Klebs-Loeffler bacilli in an exudate is positive evidence of what disease? 7. What are spores? 8. Name principal cause of poisoning from canned meats, milk and cheese. 9. In what diseases do you find the streptococci? 10. Name the bacillus of diphtheria.

PHYSIOLOGY.

1. Give the history of the corpuscles. 2. Give the composition of the blood. 3. Give the phenomena of a simple muscular contraction. 4. Write a page on reflex action. 5. Give the main general facts of the circulation. 6. Describe the mechanism of the valves of the heart. 7. Describe the movements of the esophagus and stomach. 8. What change does the food undergo in the alimentary canal? 9. Give the source and distribution of heat in the body. 10. Write a page on the influence of the nervous system on nutrition.

SURGERY.

1. Give the etiology, diagnosis and treatment in traumatic gangrene. 2. What circumstances would lead you to expect erysipelas to become a factor in your surgical cases? What measure would you use to avoid it? and, if occurring, how would you combat it? 3. What symptoms would lead you to guard against tetanus, and how would you treat the case? 4. What would be your treatment in a severe case of chilblains? 5. Differentiate chancre from chancroid. 6. Describe the operation of hare-lip. 7. A boy, aged 8, fell onto his elbow and injured it severely and has no use of the joint. What is the most probable pathologic condition, and how will you treat it? 8. Describe an amputation of the third finger at the metacarpo-phalangeal articulation. 9. What is whitlow, and how should it be treated? 10. Differentiate between talipes equinus and talipes valgus and give surgical treatment.

MATERIA MEDICA—REGULAR.

1. What are the regular preparations and doses of hydrastis? 2. What medicines are incompatible with the iron preparations? 3. What is the source from which phosphorus is obtained? 4. What is hyoscyamus? 5. What precautions should be observed in administering ether? 6. What are the physiologic effects of veratrum? 7. What are the medicinal uses of veratrum viride? 8. What are anthelmintics? 9. What is ammonium chlorid? 10. Name the sedative expectorants.

THEORY AND PRACTICE—REGULAR.

1. Diphtheria diagnosis, prognosis and treatment. 2. Purpura diagnosis and treatment. 3. Give diagnosis, prognosis and treatment of acute bronchial catarrh. 4. Write a page on the sounds of the heart. 5. Tell what abnormal sounds of the heart indicate. 6. Give diagnosis and treatment of acute peritonitis. 7. Name the chronic diseases of the liver. 8. Give the different steps in the examination of urine. 9. Write a page on epilepsy. 10. Chorea diagnosis and treatment.

THEORY AND PRACTICE—HOMEOPATHIC.

1. Describe a typical case of tabes dorsalis and name best treatment. 2. Name five leading remedies for pneumonia and give indications calling for each. 3. Give technical name, course and treatment of a typical case of spotted fever. 4. Differentiate between acute bronchitis and whooping cough in its early stages. 5. Locate and describe a typical case of appendicitis, naming best

treatment. 6. Give diagnosis and treatment of Bright's disease; also give technical name. 7. Differentiate between pleurisy and pleurodynics. 8. Describe a typical case of cholelithiasis, giving treatment. 9. Give diagnosis, prognosis and treatment of glycosuria. 10. Give the fundamental principles of the homeopathic practice, including scientific reason for giving infinitesimal doses.

MATERIA MEDICA—ECLECTIC.

1. Define the terms tonics, alteratives, sedatives and diaphoretics. Name five remedies in each class. 2. Define the terms antispasmodics, anthelmintics, diuretics, cholagogues, oxytoxics, and name five in each class. 3. What is the composition of stillingia liniment? (Scudder.) 4. Make a belladonna plaster. State where plant grows, when gathered, part used, how manipulated till in the plaster ready for use. 5. What drug plants are indigenous to the state of Kansas? 6. What is the composition and therapeutic property of King's diaphoretic powder, syrup mitchella compound, libradol, antibilious physic, and Mayer's ointment? 7. State the indications for the administering of bryonia, rhus, tox, macrotys, apis, viburnum, aconite, ipecac, echafolta, cactus, drosera, collinsonia, apocynum, nux vomica, podophyllum, hydrastis, sanguinaria, subnitrate of bismuth, sodium sulphite, muriatic acid and nitric acid. 8. What is the origin and therapeutic property of carbolic acid? 9. Name the different finished products of Peruvian bark; also of the Chinese poppy. 10. Name six common poisons and give their antidotes.

Minnesota Report.—Dr. C. J. Ringnell, Minneapolis, secretary of the Minnesota State Board of Medical Examiners, reports that some medical schools are unfamiliar with the rules of the board. All applicants must present evidence of having attended four full courses, extending over four years, at a medical college recognized by the Minnesota board. Candidates having been granted advanced standing for work done at non-medical colleges are not eligible. During the last year a considerable number have made application who have taken only a three years' course in the medical departments. At the examination in St. Paul October 6 to 8, 95 written questions were asked on 12 subjects and a percentage of 75 was required; out of 35 applicants, 23 passed and 13 failed. We have prepared a summary below of the schools having 2 or more representatives. All applicants are recent graduates (1900, 1901, 1902 or 1903) unless otherwise specified.

COLLEGE.	No. Passed.	No. Failed.	Max. Grade.	Min. Grade.	Average of Those Who Passed.	Average of Those Who Failed.
Hamline Univ., Minneapolis	3	0	77.2	76.1	76.4	.....
University of Minnesota	3	2	84.7	71.1	80.5	72.2
Rush Medical College, Chicago	6	0	88.7	78.3	82.5	.....
Northwestern Univ., Chicago	3	0	87.6	77.1	82.3	.....
Coll. Phys. and Surgs., Chicago	2	5	‡80.0	68.5	78.1	69.8
University of Iowa	1	1	77.4	*70.2	77.4	70.2
Hahnemann Med. Coll., Chicago	0	2	†70.5	65.5	.....	68.0
Chicago Homeo. Med. College	2	0	‡80.1	77.8	78.9	.....

* Graduate 1891, second examination. † Graduate 1897, fourth examination. ‡ Graduate Chicago Homeopathic Medical College, 1896, and Rush Medical College, 1898.

Following are the grades in detail of the candidates from schools having three or more representatives:

Hamline University: 76.1, 77.2 (third examination), 76.1 (second examination).
Rush Medical College: 82, 82.8, 88.7, 78.3, 85, 78.4.
Northwestern University: 82.4, 87.6, 77.1.
University of Minnesota: 76.9 (second examination), 84.7, 80.1 (second examination), 71.1 (graduate 1899), 73.4 (second examination).
College of Physicians and Surgeons, Chicago: 80, 76.3, 68.5, 68.7, 68.6, 72.9, 70.4.

In addition there were the following applicants:

PASSED.

College.	Date Grad.	Per Cent.
McGill University, Montreal	1903	77.6
University of Michigan	1903	83.5
Omaha Medical College	1902	86.9

FAILED.

University of Vermont	1903	68.3
University of King Frederick, Norway	1902	55.6

The board's grades average as follows: Passing 81.0, failing 63.3, average of all 76.7.

The American Confederation of Reciprocating, Examining and Licensing Medical Boards.—A meeting of this board was held at the Southern Hotel, St. Louis, October 27. The meeting was well attended, representatives being present from Michigan, Wisconsin, Indiana, Illinois, Kentucky, Iowa, Nebraska and Missouri. The conference was called to consider "reciprocity from the standpoint of experience in the interchange of state licenses." This subject was discussed in all its bearings by the members of the confederation, as well as by a large number of visitors; among others, Dr. Carl Black, president of the Illinois State Medical Society. It was the consensus of opinion of those present that interstate reciprocity in licensing physicians is urgently demanded by the medical profession, but that there are many obstacles in the way of a practical solution of the question. Among these are: A want of uniformity in the standards now and at the time licenses were issued; the fact that in many states licenses were formerly issued merely on presentation of a diploma, and are now issued only after a satisfactory examination before the state board of health or licensing board of the state; also that in many states, the laws strictly prohibit reciprocity; in others like Illinois, the law is silent on the subject, and in many states in which reciprocity is permitted by law, it is refused by the licensing body of the state. Most of the discussion of the afternoon was centered on qualification No. 2, which provided that "A certificate of registration, or license issued by the proper board of any state, may be accepted as evidence of qualification for reciprocal registration in any other state, provided that the holder thereof at the time of such registration was the legal possessor of a diploma issued by a medical college in good standing in the state in which reciprocal registration is sought, and that the date thereof was prior to the legal requirement of the examination test in such state." This qualification was stricken out and a committee appointed to draft a new paragraph in its place. The provisions of qualification No. 2 as rewritten, do not differ essentially from those stated above, except that the word "thereof" was made to read "of such registration," in order that it might apply to the date of registration rather than the date of the diploma. Beyond the fact that the question was discussed from all sides and that a better understanding was had of the difficulties in the way of securing reciprocity, little of a substantial nature was accomplished. The following officers were elected: President, Dr. William A. Spurgeon, Muncie, Ind.; vice-presidents, Drs. Harris H. Baxter, Cleveland, Ohio, and John A. McKlveen, Chariton, Iowa; secretary and treasurer, Dr. Beverly D. Harison, Sault Ste. Marie, Mich.

The Public Service.

[For the benefit of the members of the medical departments of the Army, Navy, etc., this department is transferred from the last page, to allow the publication of each report one week earlier. The first and last pages of "The Journal" go to press before those in the center.]

Army Changes.

Changes in the Medical Department, U. S. Army, during the week ending Oct. 31, 1903:

Halliday, Francis A., contract surgeon, relieved from duty at Fort Moultrie, S. C., and ordered to Fort McPherson, Ga., for duty.

Wall, Francis M., contract surgeon, relieved from duty at Columbus Barracks, Ohio, and ordered to Camp George H. Thomas, Ga., for duty.

Harris, Herbert I., contract surgeon, relieved from duty at Camp George H. Thomas, Ga., and ordered to Columbus Barracks, Ohio, to accompany the Twentieth Infantry to the Philippines for duty.

Hart, James W., contract surgeon, relieved from duty at Fort Washington, Md., and ordered to Fort Hunt, Va., for duty.

Richards, Alfred, contract surgeon, relieved from duty at Fort Hunt, Va., and ordered to Fort Sheridan, Ill., to accompany the Twentieth Infantry to the Philippines for duty.

Hodson, Frederick A., contract surgeon, relieved from duty at Fort Mackenzie, Wyo., and ordered to San Francisco, to accompany the Twentieth Infantry to the Philippines for duty.

Ashburn, James K., contract surgeon, relieved from duty at Fort Crook, Neb., and ordered to Fort Lincoln, N. D., to relieve Contract Surgeon Samuel S. Turner, who will proceed to his home at Chicago for annulment of contract.

Hogan, David D., contract surgeon, has arrived at Masomanie, Wis., on two months' leave of absence from the Division of the Philippines.

Jones, John F., contract surgeon, has been relieved from duty at Fort Schuyler, N. Y., and assigned to duty at Fort Totten, N. Y.

Mason, George L., contract dental surgeon, has been granted one month's leave of absence from the Division of the Philippines, with permission to travel in China.

The following named assistant surgeons, recently appointed, are ordered to report, on Nov. 3, 1903, at 9 o'clock a. m., at the Army Medical Museum Building, Washington, D. C., to Col. C. L. Heismann, assistant surgeon general, president of the faculty of the Army Medical School, for a course of instruction at that school: First Lieuts. Craig R. Snyder, Ernest G. Bingham, James D. Heysinger, John B. Huggins, Edgar W. Miller, William H. Tafft, Lloyd L. Smith.

The following named assistant surgeons are relieved from duty at the post designated after their respective names and ordered to report at the Army Medical Museum, Washington, D. C., at 9 o'clock a. m., Nov. 3, 1903, to Col. C. L. Heismann, assistant surgeon general, president of the faculty of the Army Medical School, for a course of instruction at that school: First Lieuts. Henry S. Klerated, Fort Miley, Cal.; Jay R. Shook, Fort Myer, Va.; Robert E. Noble, Fort Sheridan, Ill.; J. W. Van Dusen, Columbus Barracks, Ohio; Park Howell, Eagle Pass, Texas; R. B. Miller, San Francisco, Cal.; J. L. Mabee, Post of San Francisco, Cal.; P. L. Jones, Fort Rodman, Mass.; F. L. Palmer, Jefferson Barracks, Mo.; E. B. Vedder, Fort Columbus, N. Y.; Henry F. Pipes, Fort

Totten, N. Y.; C. L. Foster, Fort Myer, Va.; J. R. Bosley, Fort McPherson, Ga.; R. C. Loving, Fort Leavenworth; C. J. Sledman, Fort Adams, Mass.; O. G. Brown, Fort Monroe, Va.; G. F. Juenemann, Fort Columbus, Ohio; Joseph F. Siler, Fort McPherson, Ga.; Arthur Whaley, Fort Sheridan, Ill.

Thornburgh, R. M., first lieut. and asst.-surgeon, is relieved from duty at Fort Slocum, N. Y., and ordered to Fort Warren, Mass.

Mathews, George W., first lieut. and asst.-surgeon, is relieved from duty at Fort Warren, Mass., and ordered to proceed to Fort Dupont, Del.

Collins, George L., first lieut. and asst.-surgeon, resigned his commission as an officer, to take effect Oct. 23, 1903.

Webb, W. D., first lieut. and asst.-surgeon, reported for duty at West Point, N. Y., on Oct. 23, 1903.

Truby, W. F., first lieut. and asst.-surgeon, reported for duty at Fort Preble, Me., Oct. 24, 1903.

Ewing, Charles B., major and surgeon, relieved from duty at Fort Preble, Me., and ordered to Columbus Barracks, Ohio, reports his departure for new station Oct. 28, 1903.

McAndrews, P. H., first lieut. and asst.-surgeon, left Jefferson Barracks, Mo., for temporary duty at Fort Des Moines, Iowa, on Oct. 28, 1903.

Bevans, James L., first lieut. and asst.-surgeon, reported for duty at Morro Castle, Santiago, Cuba, Oct. 18, 1903, from Rowell Barracks, Cuba.

Wakeman, William J., major and surgeon, is granted thirty days leave of absence.

Wales, P. G., major and surgeon, returned to station at Fort Assiniboine, Mont., from leave of absence.

Navy Changes.

Changes in the Medical Corps of the Navy for the week ending Oct. 31, 1903:

P. A. Surgeon C. N. Fiske, commissioned passed assistant surgeon, with rank of lieutenant, from May 15, 1903.

Pharmacist E. T. Morse, detached from Navy Yard, Boston, and ordered to the Navy Yard, Portsmouth, N. H.

Medical Inspector D. N. Bertolette, detached from duty at Naval Dispensary, Washington, D. C., and ordered to continue other duty.

Surgeon F. L. Pleadwell, detached from the *Kearsarge* and ordered to duty at the Naval Dispensary, Washington, D. C.

Surgeon C. H. T. Lowndes, detached from Naval Hospital, Boston, and ordered to the Naval Academy, Annapolis, Md.

P. A. Surgeon J. J. Snyder, ordered to the *Kearsarge*.

Asst.-Surgeon Karl Ohnesorg, detached from the Naval Academy and ordered to the Naval Hospital, Boston.

Asst.-Surgeon H. A. Dunn, ordered to the Naval Proving Ground, Indian Head, Md.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon-General, Public Health and Marine-Hospital Service, during the week ended Oct. 30, 1903:

SMALLPOX—UNITED STATES.

Illinois: Belleville, Oct. 10-23, 4 cases, 2 deaths; Chicago, Oct. 18-24, 1 case.
Maine: Bangor, Oct. 10-19, 50 cases; Brewer, Oct. 10-19, 10 cases.
Massachusetts: New Bedford, Oct. 18-24, 1 case.
Michigan: Detroit, Oct. 18-24, 1 case.
New Hampshire: Manster, Oct. 18-24, 6 cases.
New Jersey: Jersey City, Oct. 19-25, 1 case.
New York: New York City, 18-24, 2 cases.
Ohio: Cincinnati, Oct. 17-23, 4 cases; Cleveland, Oct. 18-24, 1 death; Dayton, Oct. 18-24, 1 case.
Pennsylvania: Altoona, Oct. 18-26, 4 cases, 1 case imported; Johnstown, Oct. 18-24, 14 cases, 3 deaths; Philadelphia, Oct. 18-24, 9 cases, 8 deaths.
Utah: Salt Lake City, Oct. 18-24, 1 case.
Wisconsin: Milwaukee, Oct. 22-28, 2 cases.

SMALLPOX—FOREIGN.

Austria-Hungary: Prague, Oct. 4-10, 9 cases.
Colombia: Barranquilla, Oct. 5-11, 1 death.
Great Britain: Birmingham, Oct. 4-10, 6 cases; Bradford, Sept. 26-Oct. 10, 5 cases; Glasgow, Oct. 10-16, 5 cases; Leith, Oct. 4-10, 1 case; Liverpool, Oct. 4-10, 3 cases; London, Oct. 4-10, 2 cases; Manchester, Oct. 4-10, 2 cases; Newcastle-on-Tyne, Oct. 4-10, 4 cases.
India: Bombay, Sept. 16-29, 3 deaths.
Italy: Catania, Oct. 9-15, 1 death.
Netherlands: Amsterdam, Oct. 11-17, 3 cases, 1 death.
Russia: Moscow, Sept. 20-Oct. 3, 4 new cases, 7 deaths; Odessa, Oct. 4-10, 2 cases; St. Petersburg, Sept. 27-Oct. 3, 1 death.
Spain: Barcelona, Oct. 4-10, 5 deaths.
Venezuela: Bolivar, Oct. 4, present; San Felipo, Oct. 14, epidemic; Tucuyo, Oct. 3, prevailing.

YELLOW FEVER—UNITED STATES.

Texas: Laredo, Oct. 22-28, 95 cases, 10 deaths; Minera, Oct. 21-23, 3 cases, 1 death; San Antonio, Oct. 21-26, 7 cases, 1 case at Fort Sam Houston; Dewitt County, Oct. 26, 3 cases, 1 death.

YELLOW FEVER—FOREIGN.

Costa Rica: Limon, Oct. 1-15, 1 case.
Cuba: Habana, Oct. 6-9, 1 case on American S.S. Monterey from Progreso; 2 cases on German S.S. Prinz Adalbert from Vera Cruz and Tampico.
Mexico: Citas, Sept. 27-Oct. 3, 16 cases, 5 deaths; Linares, Sept. 27-Oct. 3, 555 cases, 46 deaths; Merida, Sept. 27-Oct. 3, 13 cases, 4 deaths; Nuevo Laredo, Oct. 22-27, 12 cases, 4 deaths; Tampico, Sept. 27-Oct. 3, 5 cases, 4 deaths; Vera Cruz, Oct. 10-17, 58 cases, 18 deaths.

CHOLERA—FOREIGN.

India: Madras, Sept. 19-25, 3 deaths.
Japan: Kobe, Sept. 26-Oct. 3, 2 cases, 1 death.
Turkey: Hama, Oct. 3, prevailing; Homs, Oct. 3, prevailing; Nabeck, Oct. 3, prevailing; Tripoli, Sept. 15, 15 to 20 cases daily.

PLAGUE—FOREIGN.

Australia: Queensland, Brisbane, Sept. 12, 2 cases, 2 deaths; Townsville, Sept. 4, 1 case, 1 death.
Chili: Iquique, May 15-Aug. 17, 170 cases, 101 deaths; Valparaiso, to Aug. 24, 9 cases, 2 deaths.
Japan: Yokohama, Sept. 13-26, 2 cases, 1 death.

Medical Organization.

Indiana.

LAKE COUNTY MEDICAL SOCIETY.—This society has been reorganized at Hammond with the aid of Dr. George F. Keiper, Lafayette, councilor for the Tenth District, with Dr. Frederick Howat, Hammond, president.

Iowa.

POWESHIEK COUNTY MEDICAL SOCIETY.—Physicians of the county met in Grinnell, October 9, and formed a county society on the standard plan with the aid of Drs. Edward E. Dorr, Des Moines, and David C. Brockman, Ottumwa, councilors for the Seventh and Sixth districts, respectively. The following officers were elected: President, Dr. Elbert W. Clark, Grinnell; vice-president, Dr. Edward B. Williams, Montezuma; secretary and treasurer, Dr. Pearl E. Somers, Grinnell, and censors, Drs. Samuel C. Buck, Grinnell, Charles D. Busby, Brooklyn, and Vinton S. Wilcox, Malcom.

Louisiana.

VERNON PARISH MEDICAL SOCIETY.—This society was recently organized in affiliation with the state and national organizations and elected the following officers: Dr. Mark R. McAlpin, Leesville, president; Dr. C. C. Self, Hornbeck, vice-president; Dr. Frederick W. Dortch, De Ridder, secretary, and Dr. James H. Word, Leesville, treasurer.

LAFOURCHE PARISH MEDICAL SOCIETY.—Physicians of the parish met at Thibodaux, October 24, and organized a parish society with an initial membership of 14. Dr. John M. Barrier, Delhi, president of the Louisiana State Medical Society, was present and aided in the organization, which was effected on the standard plan. Dr. Albert J. Meyer, Thibodaux, was elected president; Dr. Abel J. Price, Lockport, vice-president, and Dr. Sampson A. Ayo, secretary and treasurer.

Wisconsin.

MARQUETTE COUNTY MEDICAL SOCIETY.—Physicians of the county met at Packwaukee, September 8, and organized a county society on the standard plan, with the following officers: Dr. William J. Thomson Briggsville, president; Dr. Edward A. Bass, Montello, vice-president; Dr. William O. Dyer, Westfield, secretary and treasurer, and Drs. Thomas Lucast, Endeavor, William O. Dyer, Westfield, and Edward A. Bass, Montello, censors.

Society Proceedings.

COMING MEETINGS.

Oklahoma Territory Medical Association, Oklahoma City, Nov. 11.
Southern Surgical and Gynecological Association, Birmingham, Ala., Dec. 15.
Western Surgical and Gynecological Association, Denver, Dec. 28-29.

AMERICAN PUBLIC HEALTH ASSOCIATION.

Proceedings of the Thirty-first Annual Meeting, held at Washington, D. C., Oct. 26 to 30, 1903.

The association met in the assembly hall of the New Willard Hotel under the presidency of Dr. Walter Wyman, Surgeon-General of the U. S. Public Health and Marine-Hospital Service, Washington, D. C. The session was well attended and great interest was shown in the various subjects discussed.

Opening Address.

GEN. GEO. M. STERNBERG, in the opening address, referred to the association as an important factor in promoting the welfare of the people of the United States, not only from a sanitary point of view, but also in the way of national prosperity. After speaking of the present status of yellow fever, he discussed the incomplete sewage and water systems of the

city of Washington. The high death rate from typhoid fever, tuberculosis and diphtheria and the excessive infant mortality among the lower classes give to the Nation's capital a mortality rate which does not compare favorably with that of many other cities in this country or in Europe. A law for the condemnation of unsanitary houses is urgently needed. The sewer system should be pushed to completion and the health department should have the authority and the money necessary for the sanitary reclamation of the plague spots which disgrace an otherwise beautiful and healthful city.

Address of Welcome.

This was delivered by Hon. H. B. F. Macfarland, president of the Board of Commissioners of the District of Columbia. He referred to the work of improving the water supply and sewer systems of Washington which is in progress, and also the effort being made to secure legislation to enable the city to end the unsanitary conditions in its slums. It is fully realized that the health of the people is the first duty of the statesman, and that all else that can be done for this or any capital goes for nothing if its health is not protected and promoted.

President's Address.

Following Mr. Macfarland's welcome, Surgeon-General Wyman delivered his annual address, which will be printed in THE JOURNAL.

Report of the Committe on Car Sanitation.

This report was read by the Chairman, Dr. Granville P. Conn, Concord, N. H. The committee had no reforms to suggest that would at once settle the much-vexed question, but progress was being made, the opinions of the railroad managers were being molded and the problem was gradually being solved. The travelers have but little or no thought of the sanitation or well-being of those who may be the next passengers to occupy the same seats. The more permanent the means and methods adopted by health authorities, the more satisfactory they will prove to the commercial world and to the general manager.

Transportation of Persons Sick with Transmissible Diseases.

DR. J. N. HURTY, Indianapolis, read a paper with this title. Public opinion will not tolerate the transportation in railway trains of cases of smallpox, yellow fever, bubonic plague, diphtheria, scarlet fever and leprosy. An understanding of the dangers from pulmonary tuberculosis, influenza and typhoid fever would develop a public opinion demanding of patients having these diseases that rational regulations intended to prevent transmission must be rigidly enforced. Special compartments for persons sick with communicable diseases are impracticable.

Car Sanitation in the Republic of Mexico.

DR. JUAN BREÑA, Zacatecas, Mexico, said that since infectious germs float in the air and are deposited on moldings and ornaments and are thence again taken up by the air and inhaled, simplicity of ornamentation and smooth polished surfaces have been again and again recommended. He discussed the fittings of railway coaches and urged that, in spite of the lack of attention paid to these suggestions, sanitarians should continue to work for the proper hygienic equipment of railway coaches.

Immigration and Public Health.

DR. A. J. MCLAUGHLIN, Washington, D. C., said that in considering the danger to the public health from immigration three factors must be taken into account. 1. The physique of the immigrant. 2. His destination. 3. The presence or absence of communicable disease. The physique of the immigrant is by far the most important factor. Aliens of a race having a low physical standard almost invariably herd together in the overcrowded, unsanitary tenement districts of the great cities; while the sturdy races of unskilled laborers are scattered over a wide territory and tend to establish homes in the country or in the suburbs of manufacturing towns.

Certain loathsome and dangerous contagious diseases exist among immigrants, and constant vigilance and considerable skill are necessary to detect them. The most important, because of its frequency, is trachoma. Of the total number of cases of loathsome or dangerous diseases found in immigrants, 87 per cent. are due to trachoma, and 10 per cent. to favus.

The writer concluded that if the thousands of recruits for the sweat-shop army who arrive each year could be checked for ten years the present existing tenement-house problem would solve itself. The terrible congestion of the tenements would be relieved; the scale of wages for the sweat-shop worker would be elevated, and the general sanitary conditions of life in such districts as in the lower east side, New York City, improved sufficiently to reduce the menace to the public health from this cause to a minimum.

New Officers.

The following officers were elected: President, Dr. Charles J. Finley, Havana, Cuba; vice-presidents, Drs. J. R. Monjaras, Mexico, and W. W. Woodward, Washington, D. C.; secretary, Dr. Charles O. Probst, Columbus, Ohio; treasurer, Dr. Frank W. Wright, New Haven, Conn. The next annual meeting will be held at Havana, Cuba.

(*To be continued.*)

NEW YORK STATE MEDICAL ASSOCIATION.

Twentieth Annual Meeting, held in New York City, Oct. 19-22, 1903.

(*Continued from page 1108.*)

School Hygiene and the Great Need of Regular Medical Supervision.

DR. H. ERNST SCHMID, White Plains, presented a paper urging all physicians to do their full duty as enlightened citizens and showing how much they might accomplish. He said that the classroom should have a seating capacity of forty pupils with light entering at the side or the side and back, with glass space equal to one-fourth or one-third of the floor space, and with shades working from the bottoms of the windows. The walls should be greenish-gray. He hoped the medical profession would use its influence to secure the passage of a law requiring all schools of the state to be under constant medical supervision.

Sea Bathing.

DR. R. ABRAHAMS, New York, advised sea bathing for pityriasis versicolor, chronic eczema and senile pruritus, and claimed that the results were good, and totally different from those obtained by using salt water in a bathing establishment.

Bacteriology and Pathology of Dysentery in Children.

DR. WILLIAM H. PARK, New York, discussed this subject. He said that the investigations of the past summer showed that there were several types of cases in that locality, and that cultures from these ordinarily showed a bacillus known as the acid type. The Shiga bacillus was only found occasionally. About 50 cases had been observed, and the serum treatment used in one-half. No very striking results had been obtained, and such improvement as was observed was mainly in the severe cases; nevertheless he thought increasing experience and knowledge would show that the method was worthy of trial. Hitherto it had been assumed that there was but little difference between the two types of bacilli, and that one serum would do for both. By the production of a serum of a wider range of usefulness it was hoped for a corresponding improvement in the results.

Some Less Usual Causes of Post-Operative Elevations of Temperature.

DR. MARTIN B. TINKER, Clifton Springs, in this paper mentioned among other causes small pulmonary emboli, pericarditis, cerebral embolus, phlebitis and thrombosis affecting the saphenous veins and last, but not least, malaria. The last mentioned should not, however, be diagnosticated unless supported by the detection of the plasmodium in the blood.

Laboratory Aids to Diagnosis for the General Practitioner.

DR. V. A. ROBERTSON, Brooklyn, said that, aside from the cost of the microscope, the expense of fitting up a laboratory

for the physician was slight, and one would be well repaid for the moderate outlay. Examination of sputa for tubercle bacilli and pneumococci, of the blood for leucocytosis and for the malarial organism, and of the feces in dysentery were examples of the many ways in which the laboratory could aid the practitioner.

Treatment of Puerperal Sepsis.

Dr. James Hawley Burtenshaw, New York, in a paper on this subject, opposed sharp curettage. Lacerations should be cauterized and the uterus irrigated, after which a packing of 10 per cent. iodoform gauze should be inserted. Ergot, strychnin, quinin and alcoholic stimulants are indicated, with nutritious diet.

DISCUSSION.

Dr. Joseph B. Cooke, New York, called attention to the value of holding the fundus of the uterus after confinement as a prophylactic measure.

Dr. E. V. Delphey, New York, favored using a postpartum douche of hot iodin water as a preventive, and in septic cases, the administration of digitalis.

Dr. DeLancey Rochester of Buffalo spoke of the value of iodin locally before labor, and of iodin water after delivery in cases of known gonorreal infection.

When and How to Operate for Gallstones.

Dr. Irving S. Haynes, New York, read a paper with this title. He said that whereas late operations usually had a death rate of 40 per cent., early operations were almost always successful. In endeavoring to make an early diagnosis it should be borne in mind that biliary colic and jaundice were commonly absent, and that the patient would probably complain of digestive disturbance, with a dull pain and perhaps some tenderness in the vicinity of the gall bladder. Ochsner found jaundice absent in 75 per cent. of his cases. The pain is usually referred to the epigastrium and there is often a point of tenderness an inch and a half to the right and above the umbilicus. Severe colicky attacks are absent in about half of the cases. As ideal conditions are rarely present the surgeon is often called on to simply incise and drain the gall bladder.

The Past and Present Needs of the Medical Profession.

Dr. Frederick Holme Wiggin, in his presidential address, thought it would be very useful if our medical schools would teach their students something of the history of medicine. The profession sadly needs organization, but if this is to be done properly, physicians must have a better understanding of the fundamental principles of organization and possess a deeper sense of individual responsibility. The organization of the future must be powerful enough to check the further demoralization of the public by a continuance or extension of the abuse of medical charity; it must discountenance contract practice at ruinous rates and must defend its members against unjust attacks on their professional honor and standing. The American Medical Association should be incorporated by the national government in order not only to give the necessary dignity but to facilitate the transaction of business in any state. The American Medical Association should at stated intervals publish a national medical directory from data furnished by the component societies. A great step ahead had already been taken by the agreement of the two state medical organizations of New York to combine into a society worthy of the Empire State.

Sewage Disposal as a Means of Purifying the Water Supply of the Cities and Towns of the State.

Dr. Charles B. Tefft, Utica, showed how easy and inexpensive it is for even the farmer to protect himself and his neighbors by means of an apparatus for intermittent sand filtration.

The Treatment of Pneumonia.

Dr. DeLancey Rochester, Buffalo, in this paper, laid down the following indications for treatment: (1) To relieve toxemia; (2) to prevent failure of the heart, and (3) to meet complications as they arose. The first indication was met by the use of foot baths or other means of securing free sweating without disturbing the patient, and by giving a daily dose of a saturated solution of sulphate of magnesium. A careful physical examination of the chest should be made at every visit in order that the physician may have early warning of the occurrence of pulmonary congestion. Should this occur, it could often be checked by prompt and vigorous use of wet or dry cups or by venesection. The cups should be left on for half an hour and should be reapplied at intervals of four or six hours. The poultice jacket should be relegated to the dark ages. When the heart threatened to fail, saline infusion or hypodermoclysis should be resorted to, and this might be reinforced by the hypodermic use of strychnin, or the administration of alcohol by the mouth. If the alcohol caused excitement, ammonia should be substituted. If the bowels and skin were kept active, hypnotics would rarely be required. As an evidence of the value of the treatment thus outlined, Dr. Rochester said that there had only been 23 deaths in 210 cases.

DISCUSSION.

Dr. A. Alexander Smith, New York, preferred venesection to cupping because less disturbing to the patient. He had given both the salicylate and the creosote treatment of pneumonia a fair trial, and had obtained only negative results from the former, while the latter had only proved of benefit in cases associated with general bronchitis. He did not like to give the plunge bath to pneumonia patients, but did favor the use of a wet pack at 80 F. or higher. He believed oxygen to be a valuable therapeutic agent in pneumonia, and nitroglycerin and other vasodilators of value when cyanosis was present.

Dr. W. P. Northrup, New York, spoke strongly against the still common custom of applying a jacket poultice. Such an application was particularly unsuitable in the case of weak and feverish children. The plunge bath had proved useful in his hands in the treatment of alcoholic pneumonia.

Dysmenorrhea.

Dr. Charles Bonifield, Cincinnati, after enumerating the causes, said that if the pain is in the hypogastric region, it points to a uterine origin; if the suffering is greater during the flow there is probably a constitutional cause. If the pain is in the iliac region disease of the adnexa may be inferred. The coal-tar products are useful in these cases, and a combination of atropin and sodium bromid had been very successful in his hands. When there is defective development, dilatation of the cervix, curettement and packing of the uterus are indicated.

(To be continued.)

MANILA MEDICAL SOCIETY.

Regular Monthly Meeting, held at the Government Biological Laboratory, Sept. 7, 1903.

The meeting was a very enthusiastic one and was largely attended. There were 46 physicians present, probably the largest body ever gotten together in the Philippine Islands for scientific deliberation. The following papers were read:

Protective Inoculation Against Cholera.

Dr. R. P. Strong considered this subject under several headings, briefly summarized as follows: The work previously done on artificial immunity by Ferran, Haffkine, Kolle, Buchner, Metchnikoff, Roux and others was considered. While it is admitted that Haffkine's method, when properly applied, gives rise to good immunity in the inoculated, the local reaction is too great for the method ever to come into general use. Subcutaneous injection of either living or dead cholera vibrios produces more marked general symptoms and local reaction than does the injection of either killed plague or typhoid bacilli. The location of the specific toxin was next considered and evidence brought forward to show that the substance existed as an integral part of the living organism, and was set free only by the death of the same. In the author's form of inoculation, the cholera "receptors" were obtained from bodies of the bacteria by means of autolytic digestion. The proteolytic ferment produced by this organism brings about this result in a very satisfactory manner. This ferment is not destroyed at 60 C., and, therefore, the bacteria may be killed by careful heating from one to two hours and digested from two to five

days by this ferment, and then passed through a Reichel filter. Such a filtrate when injected into animals gives rise to autotoxic, bactericidal and agglutinative substances in their blood serum, and, moreover, protects them from the injection of fatal doses of living cholera spirilla. As the local reaction produced is very mild, such a filtrate offers itself as a practical form of protective inoculation in man. This filtrate may be evaporated and used in powdered form.

Tropical Influence on Diseases of the Oral and Dental Tissues.

LOUIS OTTOFY, D.D.S., brought out the following points in his paper: In natives the diseases of the soft tissues of the mouth show no marked variation from diseases of the same tissues in other climates. The teeth of native children, as shown by statistical comparison with the teeth of Americans, Germans, English, etc., show the same proportion of caries as exists in the latter. In adults, the condition is said to be better, partly due to smoking, a habit acquired early and indulged in by both sexes. Their teeth are subject to betel erosion, due to chewing betel nut. Unacclimated foreigners are subject to considerable derangement of the system and likewise of the soft tissues of the mouth, among them a form of ulcerative stomatitis termed stomatitis ulcerativa tropica. The soft tissues, as a rule, yield more slowly to treatment, which is also true of diseases of the dental pulp, alveolar abscess, etc. The influence on the teeth themselves is only slight, and becomes almost *nil* with complete acclimatization. In the case of acclimated foreigners, aside from liability to diseases and their slower termination, no special differentiating features are noticeable.

Therapeutics.

[It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice. Proper inquiries concerning general formulae and outlines of treatment are answered in these columns without allusion to inquirer.]

Treatment of Gonorrhea.

W. H. Whitehead, in *Ther. Gazette*, states, when a patient comes to him with an acute case of gonorrhea, that he instills into the urethra a salve rather than an astringent wash. He instructs the patient to instill one-half a dram of the following after urinating:

℞.	Hydrarg. ovidi flavi	gr. xx	1 30
	Acidi oleici	ʒi	30
	Argenti oxidi	ʒii	8
	Pulv. pepsini		
	Pulv. caroid, āā	ʒiv	15
	Albolini		
	Lanolini		
	Aquæ, āā	ʒii	60

M. Sig.: One-half a dram to be introduced into the urethra night and morning.

Absorbent cotton is then placed over the penis to catch the salve that returns; tie it loosely and instruct the patient to keep it on until he is compelled to urinate.

Internally he gives the following:

℞.	Olei santali	ʒiv	15
	Pulv. cubebæ		
	Acidi benzoici, āā	ʒi	30
	Pulv. pepsini	ʒiv	15

M. Ft. cachets No. xxx. Sig.: One before meals and at late bedtime.

In preparing the salve the oxid of mercury and silver must be rubbed up together and then dissolved in the oleic acid and later adding the liquid albolene; then add the lanolin, and finally dissolve the pepsin and caroid in the water and filter through absorbent cotton and add to the salve and triturate until a creamy mass is obtained. Care must be observed in the mixing in order to obtain a smooth salve.

The salve, according to the author, is penetrating because of the presence of the liquid albolene, and germicidal owing to the mercury and silver. It digests the fibrous exudates out of the follicles and permeates the inaccessible germ-infected recesses. He claims, by this method of treatment, that he seldom has a backward extension as so frequently occurs under irrigation and injection treatment. The salve is painless and all discharge is arrested by a two or three days' use of it. When the discharge ceases and the urine becomes clear the local treatment is suspended, but the interval treatment is continued for ten days. If the discharge returns the salve will soon check it. In treating a female use the salve in larger quantities, but only once a day, putting a plug of cotton saturated with the salve well up in the vagina, if it alone is involved, and allow it to remain for twenty-four hours. Instruct the patient to remove it and take a hot salt-water douche just previous to her taking another application. If her urethra is involved the internal treatment should be given also, and also deposit the salve into the urethra once a day. The results of the treatment in the female is even more satisfactory than in the male.

Lead Colic.

The medicinal treatment, according to Yeo, consists in: 1. Relieving the constipation and pain. 2. In promoting elimination of the lead from the body. To relieve the pain the following is recommended:

℞.	Linimenti opii		
	Linimenti belladon., āā	ʒss	15

M. Sig.: To be rubbed in freely around the navel.

An enema of soap and water, one or two pints, to which has been added an ounce (30.00) of castor oil, one half ounce (15.00) of turpentine and twenty minims (1.30) of laudanum, should be given in some cases to relieve the pain and increase the elimination. The following is recommended by the author as an aperient:

℞.	Mag. sulph.		
	Sodii sulph., āā	ʒiss	45
	Acidi sulphuriei arom.	ʒi	4
	Syr. zingiberis	ʒss	15
	Aq. cinnamomi q. s. ad	ʒxii	360

M. Ft. mistura. Sig.: Four teaspoonfuls every hour until bowels have moved thoroughly.

To procure elimination potassium iodid must be given combined as follows:

℞.	Pot. iodidi	gr. xl	2 65
	Mag. sulph.	ʒi	30
	Tinct. nucis vom.	ʒii	8
	Aq. cinnamomi q. s. ad	ʒviii	240

M. Ft. mistura. Sig.: Two tablespoonfuls night and morning.

The following mixture containing alum is recommended by Bartholow in the treatment of lead colic:

℞.	Alumenis	ʒii	8
	Acidi sulphuriei	ʒi	4
	Syr. limonis	ʒi	30
	Aquæ q. s. ad	ʒiv	120

M. Sig.: One tablespoonful every two hours.

The following treatment has also been recommended for the treatment of lead colic:

℞.	Pulv. opii	gr. 1/4	015
	Ext. belladonnæ	gr. 1/12	005

M. Sig.: One such pill every two hours for twenty-four hours.

And the following purgative:

℞.	Sodii sulph.	ʒii	8
	Mag. sulph.		
	Syr. rubi idæi, āā	ʒss	15
	Aquæ	ʒiii	90

M. Sig.: At one dose, to be repeated as necessary.

Puerperal Insanity.

The *Amer. Jour. Med. Sciences* gives an abstract of the treatment of puerperal insanity as recommended by E. W. White in *British. Med. Jour.* As soon as the premonitory symptoms are observed, according to this author, such as change in manner and feelings, quiet surroundings must be obtained and skillful supervision enforced to guard against infanticide or suicide. Enemata and milk aperients should

be given for the bowels and the following combination given at night for the insomnia:

℞. Pot. brom.
Chloralis hydratis, ää.....gr. xxx 2
Elix. simplicis .....ʒss 15
M. Sig.: At one dose.

The foregoing may be repeated twice or three times daily if acute maniacal symptoms are present, guarding against overdosing. Later on the following mixture may be substituted as a hypnotic:

℞. Trional .....gr. xx-xxx 1.30-2
Paraldehyde .....ʒiss-ii 6-8
M. Sig.: At one dose for sleep.

Opium preparations should be avoided, unless the mental symptoms, when well established, are of a maniacal character, when opium preparations are given along with proper stimulants. He recommends in such conditions the following combination:

℞. Liq. morph. acetatis (1 per cent.)....m. xx 1|30
Spts. etheris .....m. xv 1
Aquæ camphoræ .....ʒi 4
M. Sig.: One such dose three times a day.

Every effort should be made to re-establish the suppressed menstrual flow, such as the administration of iron, hot baths, aloes and ergot. Olive oil will aid in preventing loss of weight, as will alcohol.

Migraine.

Ratchvord, in *Medicine*, recommends the following combination in the treatment of migraine:

℞. Sodii sulph. .....ʒss 2
Sodii salicylatis .....gr. x |65
Mag. sulph. .....gr. l 3|30
Lithii benzoatis .....gr. v |30
Tinct. nucis vom. .....m. iii |20
Aquæ destil. .....ʒiv 120
M. Sig.: To be placed in a siphon bottle and carbonated, and a small amount, sufficient to produce a laxative effect, taken daily before breakfast.

Erysipelas.

As a local antiseptic dressing in the treatment of erysipelas the following is recommended by Stroell in *Amer. Med.*:

℞. Acidi carbol.
Tinct. iodi, ää.....gr. xv 1
Mucil. acaciæ .....ʒi 4
Alcoholis (pure) .....ʒv 20
M. Sig.: Shake and paint over the affected area every two hours until the swelling and shiny redness have disappeared.

Acute Rheumatism.

The following combination, according to Peabody, is of value in the treatment of acute rheumatism:

℞. Acidi salicylici .....ʒss 15
Ferri pyrophos. .....ʒi 4
Sodii phosphatis .....ʒx 40
Aquæ .....ʒvi 180
M. Sig.: One tablespoonful every two hours well diluted in water.

Eye Bruises.

The following combinations are recommended by *Merck's Archives* in the treatment of "black eye":

℞. Ammon. chloridi
Alcoholis, ää.....ʒi 30
Aquæ .....ʒx 300
M. Ft. lotio. Sig.: Apply locally; or:
℞. Acidi acetici dil. .....ʒv 150
Tinct. arnicæ .....ʒi 30
Ammon. chloridi .....ʒi 30
Aquæ .....ʒv 150
M. Ft. lotio. Sig.: Apply locally; or:
℞. Pot. nitratis .....gr. xv 1
Ammon. chloridi .....ʒss 2
Acidi acetici dil. .....ʒiv 15
Aquæ q. s. ad.....ʒviii 240
M. Sig.: To be locally applied.

In burns the following combinations are recommended by the same periodical:

FOR BURNS OF THE FIRST DEGREE.

℞. Thymol .....gr. x |65
Olei lini .....ʒiv 120
Sodii bicarb. .....ʒii 60
Aquæ calcis .....ʒiv 120
M. Sig.: Shake, cover the affected areas liberally with this preparation and cover with borated cotton; or:
℞. Ext. opii .....gr. v |30
Ichthyol
Liq. petrolati
Lanolini, ää.....ʒiii 12
M. Sig.: Apply on lint.

If the burns are extensive the amount of opium should be diminished.

FOR BURNS OF THE SECOND DEGREE.

℞. Airol .....ʒi 4
Lanolini (anhydrous)
Vaselini, ää.....ʒiv 15
M. Sig.: Apply locally.

[Airol is bismuth oxyiodogallate. It is an odorless, grayish-green powder, tasteless insoluble in water or alcohol. It is a valuable local antiseptic.]

℞. Xeroform .....ʒi 4
Olei lini .....ʒiiss 10
Solutionis plumbi subacet. .....ʒiss 6
M. Sig.: Apply freely on gauze.

FOR BURNS OF THE THIRD DEGREE.

℞. Ichthyol .....gr. xlv 3
Olei olivæ .....ʒiiss 10
Liq. petrolati
Lanolini, ää .....ʒix 270
M. Sig.: Apply locally.

Lactic Acid in Pruritus.

M. de Castle, according to an abstract in *Med. Rev. of Reviews*, has found that general pruritus in children rapidly disappears on the administration of lactic acid internally. He recommends it in doses of minims fifteen (1.00) daily, and for small children minims ten to fifteen (.65-1.00) of a 1 per cent. solution in divided doses during the twenty-four hours.

Chorea in Children.

The following outline of treatment is recommended by *Jour. des Pract.* in the treatment of chorea:

℞. Antipyrini .....ʒiiss 10
Syr. aurantii corticis.....ʒviii 240
M. Sig.: One dessertspoonful every two hours.

In addition the following should be given in the form of a suppository:

℞. Quin. hydrobrom. .....gr. ivss |27
Ol. theobromæ q. s.
M. Ft. suppos. No. i. Sig.: One such to be introduced at night in cases of children 6 years of age or older.

The substitution of arsenic for antipyrin is recommended at the end of a week or ten days:

℞. Sodii arsenatis.....gr. 1/3 |02
Aq. destil. .....ʒviii 240
M. Sig.: One dessertspoonful, well diluted, twice daily after meals.

The use of the cold pack and tepid baths are also recommended in the treatment of chorea.

Malbec, in *La Med. Moderna*, advises the following combinations in the treatment of chorea:

℞. Salipyrini .....ʒiiss 10
Strontii brom. .....ʒv 20
Syr. aurantii corticis .....ʒiii 90
Aq. calcis .....ʒvi 180
M. Sig.: One teaspoonful in water after each meal.

The following may alternate with the above or substitute it:

℞. Ferri glycerophos. .....gr. lxxv 5
Syr. aurantii corticis .....ʒiii 90
Vini quininæ
Vini kolæ, ää.....ʒvi 180
M. Sig.: One wineglassful after each meal.

[The wine of kola and of quinin are not standard preparations.]

Medicolegal.

SOME LEGISLATION OF THE YEAR 1903.

Kansas—Prohibition as to Exhibitions of Hypnotism.—Chapter 219 of the Laws of Kansas of 1903 provides that any person who shall induce or permit any child under 18 years of age to practice or assist or become a subject in giving public exhibitions of hypnotism, mesmerism, animal magnetism or so-called psychical forces shall be guilty of a misdemeanor, and on conviction be fined or imprisoned, or both.

Kansas—Prohibition of Marriage in Certain Cases.—The bill to prevent marriage of defectives, given in full on pages 788 and 789 of THE JOURNAL, March 21, 1903, is made Chapter 220 of the Laws of Kansas of 1903, entitled "An act regulating marriage and prohibiting marriage by or with persons afflicted with imbecility, feeble-mindedness, epilepsy or insanity, and prescribing penalties . . ." for violation of the act.

Kansas—Authorizes Temporary Permits to Practice.—Chapter 358 of the Laws of Kansas of 1903 provides that the secretary of the State Board of Medical Registration and Examination may in his discretion issue a temporary permit to practice medicine or surgery to any person who shall have made application in writing to said board for license to practice, accompanied by the prescribed fee, and proof as required by Section 3 of Chapter 254 of the session laws of 1901, and who shall be a graduate of any legally chartered medical institution of the United States or any foreign country; or such permit may be so issued to any such applicant for license, complying with said conditions, who is shown to have been licensed by the board of registration and examination in any other state or territory of the United States or any foreign country whose standards of qualification for practice are equivalent to those of Kansas. Any such temporary permit so issued shall, when recorded in the office of the county clerk of the county in which he resides, authorize the person receiving the same to practice in the same manner as a permanent license up to the next regular meeting of the board; provided, that not more than one temporary permit shall be issued to any one person, nor shall any permit be extended beyond the time herein limited.

Nebraska—Control of Contagious Diseases.—Chapter 59 of the Laws of Nebraska of 1903 provides that the State Board of Health shall have supervision and control of all matters relating to the protection of the people of the state from contagious, infectious and epidemic diseases. It shall make careful inquiry into the cause of the various contagious, infectious, epidemic and endemic diseases, and shall take prompt action to suppress and control the same. The reports of births and deaths, the sanitary conditions of localities and of employments, the personal and business habits of the people and the relation of the diseases of beast and man shall be the subject of careful study by the board, and it shall make and enforce orders necessary to protect the people against diseases of lower animals. It shall collect and preserve such information as may be useful in the discharge of its duties, and for dissemination among the people. It shall be the duty of all boards of health, and of physicians in localities where there are no health authorities, or where such health authorities fail to act, to report to it promptly on the discovery thereof, the existence of Asiatic cholera, yellow fever, smallpox, scarlet fever, diphtheria, typhus and typhoid fever, and such other diseases as it may from time to time specify.

Nebraska—Grounds for Revocation of License.—Chapter 61 of the Laws of Nebraska of 1903 amending Section 14 of Article I of Chapter 55 of the compiled statutes, title "Medicine," provides that the board may refuse to issue a certificate or may revoke one already issued for any of the following causes: The employment of fraud or deception in applying for license on diploma or in passing the examination provided for in this act; conviction of crime involving moral turpitude; habitual intemperance in the use of ardent spirits, narcotics or stimulants; unprofessional or dishonorable conduct. The words "unprofessional or dishonorable conduct," as used herein, are declared to mean: First, the procuring or aiding in procuring a criminal abortion; second, the obtaining of a fee on the assurance that a manifestly incurable disease can be permanently cured; third, betrayal of a professional secret to the detriment of a patient; fourth, causing the publication and circulation of advertisements of any medicine or means whereby the monthly periods of women can be regulated or the menses can be established, if suppressed; fifth, causing the publication and circulation of advertisements of any kind relative to diseases of the sexual organs tending to injure the morals of the public.

Current Medical Literature.

AMERICAN.

Titles marked with an asterisk (*) are abstracted below.

New York Medical Journal.

October 24.

1 *President's Address, Tri-state Medical Society of Iowa, Illinois and Missouri. Alexander Hugh Ferguson.
2 *Cancer of the Prostate. Robert H. Greene.
3 *The Differential Diagnosis Between Friedreich's Disease and Insular Sclerosis. F. Savary Pearce.
4 Radium in Medicine. Samuel G. Tracy.
5 Tubal Pregnancy; Report of Cases. Mary D. Rushmore.

1. **Conservatism of Ovaries and Tubes.**—After discussing the reproduction of defectives and advocating legislative restriction of marriage of defectives, Ferguson describes the operation of hysterosalpingostomy and salpingostomy. The indication for the former is an obstruction of the proximal end of the fallopian tube due to chronic inflammation or myoma. Age must be considered. Only patients in the reproductive periods of life should be operated on, and even if near the menopause the power to become pregnant should be retained. There would be no object in performing the operation where both ovaries are destroyed. The first thing is to determine whether the tube is obstructed at its proximal end by inability to pass a probe or force air through it, and remove the obstructing portion including the horn of the uterus down to the uterine mucous membrane, taking care not to involve the vessels immediately below the fallopian tube. Split the proximal end of the remaining portion of the tube about half an inch. Pass a mattress suture through the uterine wall from the serous to the edge of the mucous surface, continue it through the one-half of the split proximal end of the tube from serous to mucous surface and then back from mucous to serous surface of the uterine wall. Deal in a similar way with the other half of the split end from the opposite surface of the uterine wall. Traction is now to be made on these two mattress sutures and the fallopian tube is thus drawn into the wound in the uterus, its mucous membrane becoming continuous with that of the uterus, and its serous surface coming in contact with the raw tissue on each side. The sutures are then tied. Pass two or three interrupted sutures above and internal to the tube to close the uterine wall, taking care not to constrict the tube. The stitch next the tube must grasp its outer coats, so as to secure more firmly its position. All the sutures are made with chromicized catgut No. 0. This insures patency and fixation of the tube. For salpingostomy determine if the tube is obstructed by inability to pass a probe or force air. Remove the obstruction together with the distal end of the tube diagonally across the tube from above downward and outward leaving a projecting mucous membrane and as large an opening as possible. On the superior surface of the tube pass a suture through the serosa a short distance from its free edge and continue it through the mucous coat close to the edge. Pass a similar suture on the inferior and lateral surfaces sufficient to ensure a perfect union of the mucous surface. A probe can now be passed through the opening into the tube and uterine cavity. Thorough asepsis, of course, must be secured. Vaginal section is not suitable for this method; it is necessary to enter the abdominal cavity suprapubically. Several cases are reported.

2. **Cancer of the Prostate.**—Green has thoroughly studied the literature of this subject and is inclined to think it probable

that cancer occurs in as high as from 5 to 10 per cent. of old men suffering from prostatic disease. The frequency and rapidity of the glandular infection have been generally noticed by others. The average age is over 50 years and in one series as high as 68 years. In the majority of cases symptoms pointing toward trouble with the prostate existed for some time before the cancer developed. Cachexia is of similar value; often it appears comparatively suddenly in old prostatics without reason to account for it. Pain is almost an invariable accompaniment. It may be referred to the prostate, rectum, back or other parts. Hemorrhage is frequent, but not so much so as pain. It occurs perhaps in 50 per cent. of cases. The amount of residual urine is of no particular diagnostic value. The prognosis is always grave, though cases have occurred where operation has caused great improvement. He reports cases in which there has been no recurrence for over a year. He says as regards preventive treatment that if gonorrhea can be avoided, the chances for cancer will become much less frequent. In the majority of cases metastasis has already taken place and the system become infected before cancer is diagnosed. The operative treatment can then be only palliative. The chances of recognizing the condition early enough to operate before metastasis gives the only hope for cure. Quite a complete bibliography is attached.

3.—This article was abstracted in THE JOURNAL of October 31, p. 1104.

Medical Record, New York.

October 24.

6 *Prostatectomy and Galvanocaustic Prostatotomy (Bottini's operation); Their Present Status in the Radical Treatment of the Hypertrophied Prostate Gland. Willy Meyer.
7 *The Roentgen and Finsen Rays; Electrolysis; Galvanism; Faradism; High-tension Discharges, and Diagnostic Illumination. Sinclair Tousey.
8 *The Choice of Method for the Relief of Retroversion and Retroflexion. John Van Doren Young.
9 *The Non-medicinal Treatment of Constipation. Samuel G. Gant.
10 *The Frequency Wave of Epileptic Seizures. William P. Spratling.

6.—See abstract in THE JOURNAL, xl, p. 1670.

7. **The X-Rays.**—Tousey gives a description of the apparatus and technic in use for the *x*-rays and Finsen rays in ordinary office practice using the commercial current. The cost of such a current is very small, not more than five to ten cents an hour for the *x*-rays and vacuum tube work, and next to nothing for galvanic and faradic work. The apparatus is always in working order and has great advantages over the static machine.

8. **Retroversion and Retroflexion of the Uterus.**—The anatomic conditions and cause of these abnormalities are described by Young as also the treatment. The deductions from his study of the subject are given as follows:

1. Retroversion and retroflexion are never simply malpositions of the fundus, but complex changes in the relation of the whole uterus to the other structures in the pelvis and to the pelvic wall.
2. The uterosacral ligaments are the only suspensory ligaments of the uterus when the patient stands, and are the only ligaments not affected by gestation or parturition.
3. The uterosacral ligaments suspend the uterus by their attachment to the lower segment and act as a swing in supporting the rectum. Factors causing the yielding of these ligaments are: injuries to pelvic diaphragm; increased intra-abdominal pressure; constipation; straining at stool; injuries to the rectovaginal septum, causing retraction of anus, with rectocele.
4. Any method for the relief of these conditions must consider and relieve all the complicating lesions, not the least of these the pathologic condition of the endometrium.
5. All methods for holding the fundus forward must rely on the integrity of the uterosacral ligaments, together with the fibrous connective tissue of the broad ligaments to suspend the uterus.
6. Non-operative measures are applicable to acute traumatic and replaceable non-complicated cases and depend for their value on relief of pelvic engorgement, the restoration of normal circulation and the return of normal elasticity and tone to the ligaments and muscular structures.
7. The Alexander operation has a limited field of usefulness, and is of value only when there is retroflexion and the other ligaments are strong enough to support the uterus, with proper relief of other complications. It must never be forgotten that traction on the round ligaments tends to lower the plane of the uterus.
8. Ventral suspension, when performed in combination with other procedures, does relieve the malposition and prevents a recurrence of the same. Its dangers, when properly performed, are small if any, in subsequent pregnancies. The advantages of the operation are the ease and rapidity of its performance.
9. Ventral fixation is applicable only when the patient has passed the child-bearing period.
10. The ideal procedure is as follows: Curettage; repair of injuries to the cervix, retrovaginal septum and anterior wall of the vagina. Laparotomy. Sacrosuspension. Bissell operation. The disadvantages are the length of time necessary for the operation and its difficulty of performance in fat subjects.
11. In place of the Bissell operation, a ventral suspension may be substituted. This, I believe, is wise when many adhesions have been broken up and the posterior surface of the uterus is denuded of peritoneal covering or the patient's condition demands haste.
12. In nulliparæ a pessary should be worn for six months to prevent traction on the uterosacral ligaments until they have regained their tone. The action of the pessary is due to the fact that, resting on the superior surface of the symphysis, the lower segment of the uterus is held upward and the strain taken off the uterosacral ligaments. The rectocele, when no lacerations exist, is in this manner lessened.
13. The uterus should be curetted as the first step in any of these operations.
14. The adhesions so frequently found in these cases are of the greatest value to the patient, in that they fulfill a munificent purpose of nature in preventing the condition of complete prolapse during the existence of the malposition.

9. **The Non-Medicinal Treatment of Constipation.**—Gant favors the non-medicinal treatment of constipation, advocates the proper education of the patient, drinking of plenty of water, regularity of habits, condemns enemata, and says that massage intelligently practiced is essential. Electricity has been highly spoken of, but he is not prepared to say that it alone is efficacious. Divulsion of the sphincter may be required in either adults or children when the muscle has become hypertrophied or irritable and there is obstruction. Valvotomy by the method of Martin is occasionally indicated, but requires too many manipulations and instruments, too much time involves considerable danger of hemorrhage, infection and peritonitis besides causing serious confinement and discomfort of the patient. He favors for most cases the technic of the clamp operation; thus inserting his clamp which divides the valves from the fourth to sixth day and is discharged with the feces carrying the section of tissue within its grasp. It has the advantage that it can be painlessly applied in one to five minutes. There is no danger of hemorrhage, infection or complications. No dressings are required. The patient is not subjected to discomfort, need not be restricted as to diet, and in his experience it has been more effective than other procedures as it removes a section of tissue nearly half an inch wide and about an inch long. He illustrates the method showing the insertion of the clamps through the proctoscope, and their application to the Houston valves. In his experience non-medicinal treatment has been far more effective than the medicinal.

10. **Epileptic Seizures.**—Spratling finds that in 1,374 cases at the Craig Colony the approximate frequency of the attacks was weekly or oftener in 775 cases, every two weeks in 173, every three weeks in 61, and every four weeks in 244, every eight weeks in about 42, and every twelve weeks in about 49. It is safe to say, he says, that fully 50 per cent. of all confirmed epileptics have an attack weekly or oftener. A notable decline begins after the first-week period and continues up to the eighth-week period. This increase at the fourth week is due to the fact that serial attacks in many female epileptics group themselves about the time of the menstrual flow. Those in the six months' period, and there are a few that go longer, are classed as occasional epileptics; they scarcely ever show the mental impairment of the ordinary idiopathic cases. He suggests that this wave of epileptic frequency can perhaps be found to have a relationship with more or less rhythmic intoxication of the central nervous system.

Boston Medical and Surgical Journal.

October 22.

11 *Further Observations on Cervical Dislocation and Its Reduction. G. L. Walton
12 *Lesions that Augment the Development of Tetanus and Other Infections in Gunshot Wounds. Louis A. LaGarde.
13 The Plague of Athens. Charles Greene Cumston.
14 *The Condition of the Vasomotor Neurone in "Shock." W. T. Porter and W. C. Quinby.
15 *A Hitherto Undescribed Membrane of the Eye and Its Significance. Frederick H. Verhoeff.

11. **Cervical Dislocation.**—Walton refers to his former papers (*Boston Med. and Surg. Jour.*, March 21, 1889, and *Jour. Nerv. and Mental Dis.*, 1889). He remarks that the frequency of the accident is shown by the fact that in addition to the eight cases previously published he has observed at least as many others not deserving of special mention from their peculiarities.

He has made a careful study of the vertebræ which leads him to the conclusion that dorsolateral flexion, combined if necessary with slight rotation (to enable the upper articular process to pass the brim of the lower articular process), would fulfill the requirements of replacing the dislocation, the vertebra being afterward rotated into place as by the old methods. This was first suggested by Dr. Richardson. Of the 7 cases which have come to his knowledge since proposing this method 2 have been replaced in sleep, 3 during etherization and 2 by the operation itself. He reviews the mechanism of the dislocation, calling attention to the fact that the articular processes in the cervical vertebræ are so nearly horizontal that one can readily slip forward over that of the vertebra below and fall into the intervertebral notch without necessarily compressing the cord so as to produce paralytic symptoms. If the left articular process has slipped down into the notch, the head will be tilted to the left, the face being still rotated to the right in case of left dislocation. If the articular process has become caught on the crest of the process below, the head will be tilted to the right as well as rotated to the right. The side on which dislocation has occurred can always be determined by the direction of the rotation; the question whether the articular process has slipped into the notch, which is of secondary importance, can be determined by the tilting of the head. In case bilateral dislocation has occurred, the head will be carried forward and tilted directly backward. The only conditions which are likely to be confused with this cervical dislocation are torticollis and vertebral disease. The former may be determined by contraction of the sternomastoid. In cervical caries the history is the important diagnostic factor. He gives an illustration showing the method of reduction. The patient should be in a sitting posture for the operation. The head should be rocked, but without traction, for traction only lessens the effectiveness of the fulcrum necessary to reduction.

12. **Gunshot Wounds.**—LaGarde describes the conditions which seem to affect the infection in gunshot wounds and shows the result of experimentation made by firing bullets at varying velocities into animals in which the skin had been well rubbed with finely powdered charcoal. The lodgment of the bullet seems to add but little to the susceptibility to infection, and the special lesions from a ball with a certain degree of velocity as it passes through tissues are necessary to augment the susceptibility to infection. These lesions partake of the nature of hematomata. The extent of the hematomata increases with the velocity of the projectile to a marked degree, and the caliber of the ball also has a decided effect. The fissuring extending laterally from the channel track is another important factor, aside from hematomata. Burned areas are much more susceptible to tetanus infection than simple incisions. It is hopeless to disinfect a channel made by a bullet and the wounds treated by simple dressings did best of all, in Müller and Köller's experimental research, while those treated by radical measures, thermocautery, etc., gave evidences of suppuration in every instance.

14. **Shock.**—Porter has experimented as to the production of shock after stimulation of the depressor nerve, and concludes that exhaustion in the vasoconstrictor neurons can not be the essential cause of the symptoms.

15. **A New Membrane of the Eye.**—Verhoeff announces as a result of his studies:

In the pigment layer of the retina there is a fenestrated membrane, identical in structure and staining reactions with the membrana limitans externa.

The rods and cones are not nervous elements, but modified ependymal cells, and are analogous to sensory epithelium.

The limiting membrane of the rosettes of glioma retinæ is a fenestrated membrane, similar in every way to the membrana limitans externa, and the rosettes correspond to the neuro-epithelium of the normal retina.

The structure of the limiting membrane of rosettes explains why they assume their characteristic spherical and spiral-like forms.

"Neuro-epithelioma retinæ" is no more suitable than "glioma retinæ" for the class of tumors to which these terms have been applied.

Medical News, New York.

October 24.

16 *The History of the Tuberculosis Work at Saranac Lake. E. L. Trudeau.

17 *Congenital Hypertrophic Stenosis of the Pylorus. B. G. A. Moynihan.

18 *Timely Operation in Primary Appendicitis. William H. Wathen.

19 The Hypodermatic Use of Adrenalin Chlorid in the Treatment of Asthmatic Attacks. Jesse G. M. Bullowa and David M. Kaplan.

16. **Tuberculosis.**—Trudeau's lecture is the first of a series to be given by the Henry Phipps Institute and describes the history and development of the Adirondack Sanatorium. See editorial last week.

17. **Pyloric Stenosis.**—Moynihan describes the symptoms and morbid anatomy of pyloric stenosis, the child being at birth usually well nourished and of normal weight, but soon after, sometimes the first day and sometimes several weeks later, the patient begins to vomit and no measures such as change of food, etc., suffice to relieve this condition. The vomited matters are very slightly altered from their condition when swallowed and bile is never present. As soon as milk is taken it is ejected with considerable force. The temperature is subnormal, constipation invariable, abdomen collapsed, and the condition rapidly changes for the worse. The morbid anatomy always shows the same condition: an enlarged and thickened stomach, pyloric region altered with funnel-shaped circular thickening. The stomach curiously resembles the dissected-out bladder and prostate. The causation of the condition is obscure. In some cases the use of a nasal tube and washing the stomach relieves, but in a large proportion surgical measures alone will succeed. The operations are Loreta's operation of dilatation, pyloroplasty as advocated by Dent, and gastro-enterostomy. Which of these will be the generally accepted procedure it is impossible to say, but the statistical results up to the end of 1902 show that pyloroplasty had been performed three times, successfully, and in a fourth case, supplemented by gastro-enterostomy, with good results. Gastro-enterostomy, always anterior, was performed 9 times; 5 recoveries, 4 deaths. In one case the death was due to acute obstruction caused by a Murphy button used in anastomosis. Loreta's operation had been performed 9 times with 7 recoveries.

18. **Appendicitis.**—Wathen pleads for early operation. When the diagnosis is made the case should be operated on before further involvement. When the case has gone beyond the primary and timely stage he thinks it would be best to wait until the abscess is walled off in many cases, but not to let the patient go on to another attack. In many cases of inflammatory or purulent condition in the pelvis, he has found appendiceal involvement, but usually no necrosis. He thinks in such cases the appendix should be removed as it adds but little to the danger of any operation and does away with a condition that may cause future trouble.

American Medicine, Philadelphia.

October 24.

20 *Treatment of Abscess of the Liver. Thomas L. Rhoads.

21 *Injection of Paraffin for the Correction of Deformities. A. W. Morton.

22 *The Susceptibility of the Negro to Tuberculosis. Thomas D. Coleman.

23 Hernia of the Vermiform Appendix and the Removal of the Appendix During Operations for Right Inguinal Hernia. John G. Sheldon.

24 *Funic Pulsations; When to Ligate the Cord. William H. Good.

25 Hay Fever: A Discussion of Our Present Knowledge of the Disease, with Special Reference to Etiology and Therapy. Raymond Wallace.

26 Medical Advancement. William M. Welch.

20. **Liver Abscess.**—Rhoads criticises the use of aspiration in liver abscess on account of its uncertainty, and the danger of withdrawal of the infected end of the needle through the liver tissue. He prefers to diagnose by careful percussion and observation for tender spots, followed by exploratory incision, if required. After the location of the pus he would open and clear out the cavities and use rubber and gauze drainage. The most serious cases are where the thorax has to be opened and one or two ribs resected which is necessary for good drainage. The technic employed is described in full detail and can not well be reproduced. He gives morphin and atropin to relieve pain after the operation, and if much blood has been lost saline transfusion, with the application of dry heat and an enema of hot coffee for shock. Free discharge will necessitate change

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of dressings about eight hours after operation. On the following five days the dressing is changed twice a day, the patient being removed on a litter into another room so that the bedding and mattress can be aired. During the first six days, while the fibrous adhesions are forming, the patient is kept mildly under the influence of an opiate; the effects on the nervous system will determine the dosage. On the sixth day adhesions will have formed and the gauze drainage and rubber tube will be surrounded by a fibrous exudate which will have established a pathway for the pus, and they can be removed, therefore, with safety. The cavity is irrigated with warm sterile water until the flow returns clear, and a new rubber tube is carried into the cavity with strips of sterile gauze packed around it down to the abscess cavity. This practice is continued on each successive day until there is no further evidence of pus, and the sinus is allowed to close after the second week. The patient may then be about in a rolling chair in a reclining position and during the last days of local treatment will be walking about if the systemic conditions are favorable. In the convalescent stage, about ten days after operation, the patient is given thrice daily, on an empty stomach, 30 c.c. of pure olive oil in a wine glass into the bottom of which has been squeezed 10 c.c. of lemon juice. The patient soon acquires a taste for it and improves under the treatment. The effect on the intestinal dejection is marked. The oil acts by stimulating the portal circulation, increases the flow of bile, restores a natural digestive agent and antiseptic to the intestinal canal, and heals the ulcers. The dietary must be generous in quantity, but not overwhelm the digestion. He prohibits milk foods, broths, etc., but gives a solid diet in conjunction with the olive oil, administration of minced meats, well-cooked vegetables, salads and shellfish. Whatever foods are ordered, the end in view must be to give the large bowel rest.

21. **Paraffin Prothesis.**—Morton reports a number of cases and illustrates his article with microscopic drawings showing that the paraffin disappears and is replaced by connective tissue and embryonic tissue within four months. The dangers of sepsis, emboli and sloughing are mentioned. Sepsis can be prevented by asepsis; emboli by using the paraffin at the proper temperature though experiments seem to show that paraffin, the melting point of which is below the temperature of the body, gives rise to thrombosis. He doubts whether this is as dangerous as the experiments would lead one to believe. He uses paraffin of a melting point of 109 F., brought to this point by adding sperm oil, and sterilized by placing in a water bath, and exposed to heat sufficient to boil the paraffin.

22. **Tuberculosis in the Negro.**—Coleman analyzes the mortality statistics of Charleston, S.C., Augusta, and Atlanta, Ga., and New Orleans, La., as typical of the South, showing that the ratio of deaths from tuberculosis in the negro is much greater than in the whites, and gives as the reasons their immorality, irregular habits, general lack of hygiene, etc. He thinks with proper measures thoroughly carried out, this mortality could be wonderfully reduced.

24. **Funic Pulsations.**—Good holds that pulsation in the umbilical cord is of fetal and not of maternal origin. To illustrate this he reports an instance where pulsation persisted for some time after the placenta had been expelled from the uterus. The time to ligate the cord, he says, is when there is firm contraction of the uterus.

St. Louis Medical Review.

October 24.

27 *Personal Experience in the Treatment of Typhoid Fever. J. Franklin Welch.

27. **Typhoid.**—The treatment of typhoid advocated by Welch is proper nursing, plenty of sterile drinking water, a bland, liquid, digestible diet, the use of the Brand method if possible, but sponging in other cases. He thinks medicines have their share in the treatment. It is highly important that the bowels be freely evacuated in the beginning, and for this he would give mild hydrargyrum chlorid and sodium bicarbonate in grain doses every hour followed by carbonate of guaiacol in 3-gr. doses, alternating with the following prescription: Liquor potassi arsenitis, 1 dram; nitrate ammonia, 2 drams; distilled water, 3 ounces, given in teaspoonful doses. These have been very satisfactory in his hands. Guaiacol is a splendid antiseptic, Fowler's solution, an antidote to malaria as well as a good nerve tonic, and the nitrate of ammonia, a mild cardiac stimulant, all of which are indicated in the treatment of typhoid fever in the Mississippi Valley.

Cincinnati Lancet-Clinic.

October 24.

28 Suggestion and Therapeutics. R. H. Grube.
29 Constipation Cured by Massage, Together with Faradic Electricity. George J. Monroe.
30 Surgery of the Prostate, Pancreas, Diaphragm, Spleen and Thyroid. (Continued.) B. Merril Ricketts.

Journal of Nervous and Mental Disease, New York.

October.

31 *The Sign of the Orbicularis in Peripheral Facial Paralysis. George W. Jacoby.
32 *Gigantism and Leontiasis Ossea, with Report of the Case of the Giant Wilkins. (Continued.) Peter Bassoe.
33 *Studies on the Cerebral Cortex in the Normal Human Brain and in Dementia Paralytica. (Continued.) G. Alfred Lawrence.

31. **The Orbicularis Sign.**—This sign, which consists in inability of a hemiplegic to voluntarily close the eye on the the generally accepted one of Broadbent, that it is due cussed by Jacoby with reference to its significance in facial paralysis. The theory for the reason why the upper facial is free or less involved in central paralysis accepted by him is the generally accepted one of Broadbent, that it is due to bilateral representation of this innervation in the brain. As regards facial paralysis, the question of decussation arises. He reviews the literature of the subject and reports cases which seem to bear out his ideas, giving his conclusions as follows:

1. The statement of Bard, that the sign is invariably lacking in peripheral facial paralysis and is, therefore, a distinguishing mark of central affection, is incorrect. 2. The presence of the sign in peripheral paralysis is further proof of the existence of commissural fibers between the nuclei of the seventh nerves. 3. The sign is of clinical value, in so far as its presence in peripheral paralysis shows that complete recovery has not yet occurred. 4. The secondary over-action in the orbicularis palpebrarum, which is late in appearance and always coincides with some recovery in power, does not occur in those cases in which the sign, having been present, has passed away.

32. **Gigantism and Leontiasis Ossea.**—Bassoe tabulates the literature of 42 cases. He finds that heredity seems to play no part in the production of this condition, and that the association of sarcoma must be more than a coincidence. The symptoms are explainable by pressure. The diagnosis discussed is between the conditions described and osteitis deformans, acromegaly, sarcoma, etc. There is little to be expected from treatment.

33. **Paresis.**—This installment of Lawrence's article is mainly devoted to technic and an examination of the cortical changes.

Archives of Pediatrics, New York.

October.

34 A Case of Pulmonary Osteoarthropathy. Thomas Morgan Rotch.
35 A Case of Chondrodystrophy Fetalis. J. Park West and W. O. S. Piper.
36 *Prophylactic Measures to Prevent the spread of Vulvovaginitis in Hospital Services. Henry Koplik.
37 A Study of Two Cases of Intussusception. Francis Huber.
38 The Prophylactic Use of Diphtheria Antitoxin in School Children. Augustus Caille.
39 Congenital Gastric Spasm. J. Park West.

36. **Vulvovaginitis in Hospital Service.**—Koplik notices the tendency of this disorder to spread under hospital conditions and gives illustrations from epidemics sometimes started among the children. It is conveyed, he thinks, in many ways. The utensils may be the first source of infection or the linen and rubber sheets, diapers, underclothing, wash rags and basins and last, but not least, the bath tubs. Every child on admission to his service is thoroughly examined first of all for any rectal, urethral, or vaginal discharge and cultures taken. No child is bathed in the common bathtub until pronounced free from vaginal, rectal or urethral discharge by the house physician. Each child is given an individual basin, comb and bedpan kept at the head of each bed. No bar soap is used; the liquid soap alone. Each bed is fitted permanently with a small brass thermometer case and every patient supplied with his own thermometer, which, with its case, is carefully cleansed

and disinfected after discharging the patient. A bedpan once having been used on a patient suffering from discharge is never again used on a well one. The diapers are made of cheesecloth and thrown away when soiled. In case of patients with an infectious discharge the bed is surrounded by a red bandage to warn the nurses, and the bedding, rubber sheets, draw sheets, and all the linen are marked V. D. (vaginal discharge) and never used again except in a similar case. He has thus instituted a most complete system of isolation protecting each little patient from the others. Should a case be received it can not spread. It is not a simple matter as he has seen deaths occur from infection of the peritoneum resulting from this condition, and many cases of subsequent trouble and sterility in later life can be traced to this infection in early childhood.

Chicago Medical Recorder.

October 15.

40 The Management of Acute Anterior Urethritis of Gonorrheal Origin. P. Kriesal.
41 *Radical Cure for Blennorrhea of the Lachrymal Sac. E. F. Snydacker.
42 Compound Fractures. I. C. Gary.

41. **Lachrymal Blennorrhea.**—Snydacker prefers the subperiosteal operation for this condition, starting the incision above the internal canthal ligament, extending downward 2 or 3 mm. anterior to the crest of the lachrymal bone for a distance of 2½ to 3 cm. The incision extends through the periosteum, which is raised with an elevator down into the lachrymal fossa. In this way the nasal and posterior surface of the lachrymal sac can be lifted up with the periosteum as far as the beginning of the lachrymal canal. The superior portion of the sac can then be separated from its attachment to the surrounding tissue by carefully cutting with small scissors. Then the sac and periosteum are seized with forceps and pulled up so as to cut the sac off as low down and as near the beginning of the canal as possible. The beginning of the canal should be thoroughly curetted so as to make good drainage into the nose. The wound is sutured and a pressure bandage applied. He considers this the easiest and quickest method of performing an operation; better than dissecting out the sac without the periosteum. There is no question in this method of removing the sac entire.

International Journal of Surgery, New York.

October.

43 *Treatment of Cancer by the X-Ray, with Remarks on the Use of Radium. William James Morton.
44 *On the Cure of Lupus Erythematosus by Actinic Light. William S. Gotthelf.
45 *Some Observations in X-Ray Work. G. P. Edwards.
46 Personal Observations of the Therapeutic Value of the X-Ray. William F. Campbell.
47 How to Secure the Best Skiagrams; Some Practical Points in the Manipulation of Vacuum Tubes in Radiography and Radiotherapy. Walter M. Brickner.
48 Observations in the X-Ray Treatment of Malignant Disease. Finley R. Cook.
49 New Treatment of Cicatrices. Henry R. Varney.
50 *Radiotherapy, with Report of Eleven Cases. Charles D. Center.

43. **X-Ray and Radium for Cancer.**—Morton holds that the earlier the malignant disease is discovered and treated by the *x*-ray the better, and that in its earlier stages radiation treatment is preferable to operation. When cancer has become more advanced operation is required. After operation the *x*-ray treatment is always advisable, and for non-operative cases there can be no question but that it offers the only chance for relief. He points out certain considerations: 1. That treatment should be begun early before the involvement of the lymphatic system to any extent. 2. The type of cancerous diseases is an important consideration. Squamous-celled carcinoma or the rodent ulcer type may claim the possibility of 100 percentage of cures. 3. If the cancer, however, has broken down and become a large open ulcer the chances are less than if the skin remains unbroken. 4. Open ulcers, moreover, offer a chance for secondary septic infection. For this reason he invariably covers the open ulcer during treatment with a layer of absorbent cotton. The intensity of the ray is a matter which severely tests the judgment of the operator. In deep-seated carcinoma of the breast or other internal tumors there is no doubt that treatment can be carried to the point of exciting severe dermatitis to the advantage of the patient. On the other hand, in superficial growths or one directly beneath and involving the skin, there is great danger in producing dermatitis. In such cases the operator may either kill or cure the patient. Gentle *x*-ray treatment given three times weekly to the point where reddening of the skin is not pronounced, will often cause these tumors to shrink and wither away, while severe *x*-ray treatment would produce rapid extension of the disease. Morton alludes to the publication of Edison in regard to cancers and the notion that the system may become saturated with the *x*-ray and subject to a multitude of ills. He says it is hardly fair to compare the intelligent use of the agent to the protracted exposures of the hands and arms of exhibitors, and the bugaboo of over-saturation by the *x*-ray does not exist in scientific medicine. His method is to give treatments three or four times a week, of fifteen to twenty minutes' exposure at a distance of 9 in., with *x*-ray radiation intensity affording a given picture of the lower end of the radius and ulna at 2 feet; thus producing a fair dermatitis in two to four weeks. By following this plan he has never been surprised with an unexpected burn of any severity. In cases where the treatment must be general, as in Hodgkin's disease, the patient may be exposed to the rays at the distance named and the intensity referred to daily for three-quarters to an hour without suffering harm. He does not believe in shields for the local treatment of cancer. The greater the area treated the greater the chances of safety to the patient. His theory of artificial fluorescence of living tissues is mentioned and he remarks on the use of radium, which he says has much the same effects as the *x*-rays. He describes his technic.

44. **Lupus Erythematosus.**—Gottheil believes in the treatment of lupus erythematosus by the Finsen light rather than by the *x*-rays, and remarks that it differs markedly from the latter. In the latter the reaction is uncertain and may appear late and be deep-seated. In the light treatment the reaction is superficial and appears quickly, lasting only a short time and never does any harm. His results he claims are brilliant, though one of the cases he reports was a failure. It was a case of long standing and very extensive disease.

45. **X-Ray Work.**—From his experience with the *x*-rays Edwards concludes that there is no place in the work for empiricism and no one should undertake it without being reasonably familiar with the physical, physiologic and therapeutic properties of the agent. It is a comprehensive and difficult branch of therapeutics and should be taught in medical schools. While in competent hands it is safe and reliable and capable of great good, in incompetent ones it is an agent fraught with great mischief. In the hands of the experienced operator with improved apparatus and technic he holds that 100 per cent. of skin cancers may be cured. Lesions involving the mucous surfaces about the head are more difficult to control and until improved methods are devised for working the rays on unexposed regions in the mouth and throat, not over 50 per cent. of cures can be expected. Lesions involving the cervix uteri and other accessible parts should be controlled by an intelligent, persevering fight. Deep-seated subcutaneous growths, adenomas, etc., should be controlled before dissemination. In all cases relief from pain and other sensory disturbances, retardation of the progress of the disease and general improvement may be expected. In accessible lupus vulgaris a cure may be anticipated in every case. Lupus erythematosus is difficult and requires more radical and severe treatment than is ordinarily demanded.

50.—This article has appeared elsewhere. See THE JOURNAL of September 12, 1903, p. 686.

Bulletin of the Johns Hopkins Hospital, Baltimore.

October.

51 Dr. Samuel Fuller, of the Mayflower (1620), the Pioneer Physician. Thomas F. Harrington.
52 *The Relation of the Status Lymphaticus to Sudden Death, Death Under Anesthesia and Infection. George Blumer.
53 A Case of Syphilis of the Peripheral Nerves and Lungs. Charles M. Remsen.
54 The Medicine and Doctors of Juvenal. Eugene F. Cordell.

52. **Status Lymphaticus.**—The following are the conclusions of Blumer's article:

1. The condition known as the status lymphaticus is a definite pathologic entity. 2. It is probably associated with, if not due to, a condition of intermittent lymphotoxemia. 3. It may be associated with sudden death, probably as a result of lymphotoxemia alone in some cases, or as a result of the action of toxic, physical or psychic injuries, which are rendered much more powerful than usual by the predisposing action of the lymphotoxemia. 4. In some cases the sudden death is undoubtedly mechanical and due to asphyxia from pressure of the enlarged thymus on the trachea. 5. The subjects of the status lymphaticus can be recognized clinically in some instances.

Bulletin of the Kentucky State Medical Association, Louisville.
October.

55 Cerebral Syphilis. George P. Sprague.
56 *But One Profession of Medicine. Dudley S. Reynolds.
57 *Pertussis. Philip F. Barbour.
58 *A Plea for More Accurate Diagnosis in Diseases of the Upper Abdomen. Louis Frank.

56.—This article appeared in THE JOURNAL, xl, p. 1781.

57. **Pertussis.**—The dangers of pertussis are pointed out by Barbour. The treatment which he considers most useful is that by calcium sulphid. It has proved more efficient than any other agent in his experience. It is not always possible, however, to obtain it in an effective condition, as most calcium sulphid on the market is inert, he says, because it is not sufficiently protected from oxidation during its manufacture, or it deteriorates from imperfect protection afterward. The chocolate-coated pills, he thinks, retain the salt in a purer condition than the gelatin coated. The dosage is approximately ½ gr. every two hours for a child 1 year old, but it may be used in larger or smaller doses according to the results. The object is to saturate the system so that the breath smells of hydrogen sulphid. At the orphan asylum of which he is in charge 15 cases occurred rather consecutively during 1902. In two months after the beginning of the epidemic the last child affected was entirely well of the cough which follows the convulsive stage. When we consider that the average case of whooping cough lasts three months under the most favorable conditions this result would seem to be remarkable.

58. **Abdominal Diseases.**—Frank holds that chronic indigestion and dyspepsia *per se* do not exist in nearly the number of cases so diagnosed, and that disorders which give rise to the symptoms are generally those of the gall bladder or due to stomach ulcer. Only careful examination and gastric analysis can reveal the true state of things, and early diagnosis is better as giving the patient more chance. If a strong presumptive diagnosis can not be made from the symptoms by exclusion an exploratory operation is advised.

Detroit Medical Journal.
October.

59 *Operation of Total Extirpation of the Prostate in Its Capsule. J. R. Kennedy.
60 *Conclusions from Fifty-one Intubated Fatal Cases of Laryngeal Diphtheria. B. R. Shurly.
61 A Case of Gunshot Wound of the Brain. Hal C. Wyman.

59. **Prostatectomy.**—Freyer's operation of perineal prostatectomy is advocated by Kennedy, who describes the method which, as is well known, is preceded by suprapubic cystotomy. He has himself employed it in a number of cases similar to those in which he has seen Freyer operate and with the best results. Five of them are reported.

60. **Laryngeal Diphtheria.**—The 51 cases here analyzed by Shurly point out the importance of the early administration of large doses of antitoxin and immunization of those exposed. He calls attention to the fact that there is a misunderstanding among physicians as to the meaning of double x and single x serum, which are simply measures of quantity and not of strength of units. In other words, 2,000 units single x are identical in curative value with 2,000 double x, and a mistake may lead to fatal results. The chief reasons why the cases analyzed were fatal he gives as follows: 1. Delay in giving the large initial dose of antitoxin, either by delay in calling the physician or by delay by the physician. 2. Insufficient dosage at later intervals. 3. Delay in intubation. 4. The presence of hypertrophied tonsils and adenoids. 5. Lack of proper nursing. With proper attention to dosage he thinks the mortality will be reduced to at least 5 per cent. and intubation be given its proper place among the rarer methods of operative interference.

Therapeutic Gazette, Detroit.
October 15.

62 *Hyoscin in the Treatment of Morphinism. George E. Pettey.
63 A Note on the Internal Administration of Adrenalin for Control of Hemorrhage. Homer Dupuy.
64 *Symptoms and Diagnosis of Gastric Ulcer, with Remarks on the Treatment with Large Doses of Subnitrate of Bismuth. John B. Woodville.
65 *Directions for the Use of the Vaginal Douche. Byron Robinson.
66 *Some Reasons Why We Should Use Antiseptics in the Treatment of Typhoid Fever. J. M. Peck.
67 Treatment of Ménière's Disease, with Report of Case. J. M. Bradley.

62. **Morphinism.**—Pettey answers Crothers' criticism as to the use of hyoscin in the treatment of morphinism, claiming that while it does not cure morphinism, and any one who expects it so to do will be disappointed, it fills a most important place in the treatment. It controls suffering from the withdrawal of morphin, and when used in the quantity and for the length of time it is required for that purpose may be used with absolute safety. Although it is a narcotic, it differs so greatly from morphin in its effects that its use for the length of time required does not perpetuate the desire or necessity for the use of morphin. It overcomes both of these and keeps the patient comfortable while he is abstaining. He does not see what more can be expected.

64. **Gastric Ulcer.**—Woodville treats gastric ulcer by diet restricted to sweet milk with the white of one or two eggs beaten up in half a glass of water at intervals of two to three hours, and the use of subnitrate of bismuth in doses of 45 to 120 grains, suspended in half a glass of milk, three times a day, continued without intermission for three weeks. Used in this way bismuth relieves the vomiting and forms a protecting coat over the ulcer under which the process of repair may go on without interruption. Usually at the end of the time mentioned the diet can be increased by the addition of broths, soft-boiled eggs and crackers. He reports cases. He has never seen any cases of poisoning by these large doses of bismuth. He keeps the bowels open by daily rectal injections and never gives cathartics to the patients by the mouth.

65. **The Vaginal Douche.**—Robinson uses for this purpose a fountain syringe with a four-foot head. He begins with four quarts to those accustomed to it, and two quarts to those who are unaccustomed, at a temperature of 105 F., increasing both the amount and the temperature until the water is as hot as it can be borne, and until a maximum of fourteen quarts is used. He gives the douches in the morning and in the evening just before retiring. The duration required to take each gallon of douche is eight to ten minutes, though less if the full amount is given. The patient should be on the back with thighs and legs flexed. A handful of salt or a teaspoonful of alum can be added to each gallon to dissolve the mucus and pus, acting also as an astringent and antiseptic and for hardening the tissues. Other astringents are less valuable. Sodium sulphate is the best general solvent for the discharges. The tube should be sterilized, boiled and each patient should have her own. The utility of the douche is that it contracts the tissues and vessels, absorbs exudates, checks secretions, stimulates, relieves pain, cleanses, checks hemorrhage, curtails inflammation and drains the genital tract. The best disinfectants for the douches are carbolic acid, permanganate of potassium and biniodid of mercury. Disinfectants, however, are secondary in value to solvents of mucus, pus and leucocytes. The douche should be non-irritating, should be clear, economical and to be of curative effect in pelvic disease should be continued for months.

66. **Typhoid Fever.**—The wisest course in typhoid, according to Peck, is to treat the cases under the assumption that there is sepsis in the intestines. Of the numerous antiseptic agents which may be administered there are none, he thinks, so good as chlorin and acetozone. His first experience with chlorin was in 1895. Since then he has never attempted to treat a case without its use. As yet he has had no experience with acetozone, but numerous testimonies lead him to class it with chlorin. Neither of these drugs are injurious to the human organism, but promptly kill typhoid bacilli in the presence of moisture outside of the body, and when given early in liberal

quantities to persons infected with typhoid bacilli the majority of the characteristics of severe typhoid do not appear. He mentions also urotropin for clearing the urine as another valuable antiseptic; also sulphocarbolate of zinc, guaiacol, mercury and salol, but all as secondary to chlorin and acetozone.

Woman's Medical Journal, Toledo.

September.

68 Acute Plastic or Fibrinous Pericarditis. Mary Wilson.
69 *The Fatality of Whooping Cough. Elisa H. Root.

69. Whooping Cough.—The fatality of whooping cough which is popularly considered to be almost *nil* is pointed out by Root as a decidedly serious matter. She says that statistics prove that it is more fatal in many localities and at certain times than scarlet fever. In the United States Census Report for 1900, for example, we find that 663 died in New York of whooping cough and 549 from scarlet fever. Death usually occurs from the complication of pneumonia, but asphyxia or marasmus, cerebral apoplexy and emphysema after rupture of the larynx are occasionally reported as the cause of death. Severe disturbance of the nervous system or intelligence, visual defects or even deaf-mutism may remain after apparent recovery. While whooping cough is not carried by individuals not ill of the disease, it is actively contagious from one person to another. Its control need not be so complicated and far-reaching as that of scarlet fever. It is advisable, however, that it should be isolated. To make it a notifiable disease would add in gathering statistics and give us better data as to its true serious import.

Medical Fortnightly, St. Louis.

October 10.

70 Fighting Cholera in Manila. Charles M. Blackford, Jr.
71 A Few Facts Concerning Cirrhosis of the Liver. O. E. Lademann.
72 Puerperal Infection in Private Practice. John A. Hale.
72½ Presentation of a Case of Abdominal Pulsation for Diagnosis. Walter C. G. Kirchner.

Medical Age, Detroit.

October 10.

73 Management of Pregnancy. W. S. Phillips.
74 Second Summer Complaint of Infants. William R. Moss.
75 A Method of Dealing with Fractures. J. B. Taulbee.

The Northwestern Lancet, Minneapolis.

October 15.

76 The Early Symptoms of Neurasthenia, Hysteria and Melancholy. Dwight S. Moore.
77 Some Observations on Paretics Admitted to the South Dakota Hospital for the Insane During the Past Thirteen Years. L. C. Mead.
78 What is Necessary to the Early Treatment of Insanity? H. A. Tomlinson.

Annals of Gynecology and Pediatry, Boston.

October.

79 The Treatment of Infantile Spastic Paralysis. E. H. Bradford.
80 Spinal Analgesia. James T. Greeley.
81 Maternal Impressions. William S. Birge.
82 A Case of Obstruction of the Sigmoid. T. W. Luce.
83 Hand Disinfection. The Surgical Aes Triplex. W. A. Briggs.

Physician and Surgeon, Detroit and Ann Arbor.

August.

84 Light and Invisible Rays Employed in Medical Practice Considered from a Physical Standpoint. Vernon J. Willey.
85 A Case of Fecal Accumulation. James B. Wallace.
86 A Daily Study of Foods Producing or Not Producing Casts, Fatty Epithelia and Albumin in Urine. Ephraim Cutter.

Pediatrics, New York.

September.

87 Rheumatism in Childhood. Alfred Friedlander.
88 The Control of Fever and Convulsions of Infancy and Childhood. Thomas J. Long.
89 A Case of Popliteal Aneurism in a Young Boy. J. F. Black.
90 Artificial Feeding of Infants. G. E. Decker.
91 Recent Studies Regarding the Morphology of the Diphtheria Bacillus. Arthur T. Laird.
92 Report of Fracture in the Shaft of the Femur. I. B. Perkins.
93 X-Ray Report of Above Cases. S. B. Childs.

Journal of the Kansas Medical Society, Topeka.

October.

94 Popular Dose Measures. L. E. Sayre.
95 An Interesting Case (Fecal Impaction in Premature Labor). C. K. Vaughn.
96 Vital Statistics. Arthur W. Clark.
97 A Plea for Early Operation in Appendicitis. M. C. Porter.
98 The Rational Treatment of Pulmonary Phthisis. J. Hobert Egbert.

Occidental Medical Times, San Francisco.

October.

99 Mosquitoes and Malaria. J. J. Kinyoun.
100 What Does a University Do for a Medical School? Douglass W. Montgomery.
101 Asthma Produced by Urethral Irritation and Stricture. G. L. Eaton.
102 Infant Feeding. R. C. MacDonald.
103 Illuminating Gas. E. V. Lamorce.
104 Epithelioma of the Penis. Douglass W. Montgomery.
105 Acute Radiating Parenchymatous Keratitis. Robert D. Cohn.

Medical Summary, Philadelphia.

October.

106 Primula Sinensis (Daisy Primrose) Poisoning Mistaken for Eczema. J. C. Densten.
107 Are Hemorrhoids Ever Beneficial? George J. Monroe.
108 Oxychlorid of Copper. W. Ashton Kennedy.
109 Gems from Practice. A. V. Banes.
110 Natural Diagnosis. William H. Burgess.
111 Leucorrhea. J. A. Burnett.
112 Some Notes on Spiritualism. T. K. Galloway.
113 An Interesting Case: Proprietary Remedies, etc. J. S. Leachman.
114 A Usually Unrecognized Cause of Amenorrhea. W. H. Beatly.

New England Medical Monthly, Danbury, Conn.

October.

115 Puerperal Sepsis. Dr. Reidhaar.

Western Medical Review, Lincoln, Neb.

October 15.

116 Pauperization of the Medical Profession. Chester A. Brink.
117 General Paresis. J. M. Alkin.
118 Hysterical Blindness (Binocular). D. C. Bryant.
119 Sudden Death. Edwards Bates.
120 Toxins and the Adrenals. W. L. Welsh.
121 The Atypical in Medicine. J. Lue Sutherland.
122 Aphonia. J. A. Haggard.
123 Operations on the Tonsil; Technic and Indications. Henry B. Lemere.

Medical Standard, Chicago.

October.

124 The History of Nephritis. Arthur R. Elliott.
125 A Surgical Clinic (Adenoma of Thyroid). N. Senn.
126 The Evolution of Massage in Traumatic Affections of the Joints. Hugo A. Oldenborg.
127 A Gunshot Wound. Orville W. Mackellar.
128 Business Methods for a Physician. C. U. Collins.
129 Richard Bright. Alfred S. Burdick.

Iowa Medical Journal, Des Moines.

October 15.

130 Functional Albuminuria. Edward L. Rohlf.
131 Observations and Impressions of Medicine and Medical Men Abroad. G. E. Crawford.
132 The Status of the Health Department in Municipal Affairs. L. A. Thomas.
133 Diarrheal Diseases of Children. Jennie Ghrist.

Memphis Medical Monthly.

October.

134 Health, Heat and Ventilation. James B. Cook.
135 Traumatic Lesions of the Spinal Cord. B. F. Turner.
136 First Aid in Railroad Injuries. G. B. Thornton.

Oklahoma Medical News-Journal, Oklahoma City.

October.

137 The Value of the Study of the Blood in the Diagnosis of Surgical Affections. John T. Moore.
138 The Local Treatment of Ulcers. L. W. Palmer.

Medical Bulletin, Philadelphia.

October.

139 Address Delivered at the Opening Exercises of the Medico-Chirurgical College. George H. Meeker.
140 Neurasthenia. J. V. Shoemaker.
141 Uremic Hemiplegia. José Valdés Anciano.

The Post-Graduate, New York.

October.

142 Work of the Sanitary Department of Havana. W. C. Gorgas.
143 Tumors of the Bladder. Henry G. Spooner.
144 Hare-lip and its Treatment. Charles R. L. Putnam.
145 Carcinoma of the Pancreas and its Diagnosis. Stephen S. Burt.
146 Progress in the Treatment of Congenital Hip Dislocation. Henry L. Taylor.
147 Acute Tuberculous Meningitis in an Adult. Stephen S. Burt.
148 Gynecologic Operations at the Post-Graduate Hospital During the Summer Months. Abram Brothers.
149 Notes from the Clinics. Henry L. Taylor and Wendell C. Phillips.

Medical Times, New York.

October.

150 The Kinesipathic Treatment of Rectal Diseases. G. H. Patchen.
151 The Outlying Provinces of the Digestive Specialty. A. L. Benedict.
152 The Etiologic Factors in Cholelithiasis. Marshall O. Terry.
153 Practical Points to Be Emphasized. William Wormley.
154 Eczema and Erythema as Seen by the General Practitioner. M. McCrory.
155 Gastric Neurasthenia. John H. Blackburn.

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Journal of Medicine and Science, Portland, Me.

October.

156 "The Great English Discovery," Lemon Juice in Typhoid. F. A. Hanson.

FOREIGN.

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal, London.

October 17.

1 The Purpose and Maintenance of Our Universities. Victor Horsley.
2 Medical Legislation and Education. William S. Church.
3 *Discussion on the Pathology and Treatment of Tuberculosis of the Uterus and Adnexa. James H. Targett, J. A. C. Kynoch, Arnold W. W. Lea, Herbert Snow and others.
4 Diagnosis and Treatment of Uterine Fibroids. Murdoch Cameron.
5 *A Further Series of 32 Cases of Total Extirpation of the Prostate for Radical Cure of Enlargement of that Organ. P. J. Freyer.
6 *On a Method of Treating by Operation Paralysis of the Upper Root of the Brachial Plexus (Erb-Duchenne Type). A. H. Tubby.
7 The Pathology and Treatment of Hallux Rigidus, Hallux Flexus and Hallux Extensus. A. H. Tubby.
8 *Phelp's Operation of Club-Foot. E. Muirhead Little.
9 *Cystic Tumors of the Mammæ: Their Removal by "Forcible Massage" without Incision. Herbert Snow.
10 The Substitution of Temporary and Absorbable for Permanent and Unabsorbable Sutures in the Operations on Bone. R. H. Anglin Whitelocke.
11 *The Surgical Treatment of Chronic Gastric Ulcer. C. Mansell Moullin.
12 *The Open-air Treatment of Surgical Tuberculosis. Edward Deanesly.

3. Tuberculosis of the Uterus and Adnexa.—Targett shows the frequency of this complication in the statistics of the Brompton Hospital, Johns Hopkins Hospital and elsewhere. In many cases tuberculosis is not diagnosed and the naked eye changes are often so slight as to be overlooked. The fallopian tubes are the points of attack in nearly 90 per cent. of cases; and in them it may take on one of three forms: diffuse miliary tuberculous salpingitis, caseous tuberculous salpingitis and tuberculous pyosalpinx. The peculiar features of tuberculous pyosalpinx are its elongated banana-like shape, the persistence of the fimbriated extremity, the absence of adhesions on its serous surface, and the comparative thinness of the sac wall. The contents are usually free from pyogenic organisms and often do not contain tubercle bacilli. The uterine extremity will, however, be found thickened and have the characteristic structure of tuberculous growths. Tuberculosis of the body of the uterus he finds remarkably similar to the condition in the tube. We have thus a caseous tuberculous perimetritis, a diffuse miliary form, less frequent, and the true pyometrium, comparable to the pyosalpinx above described. In the majority of cases the uterus is infected by extension of the disease from the tubes, rarely from the cervix. He considers primary corporeal tuberculosis dubious, though it has been attributed to placental infection. As regards diagnosis he insists on the importance of previous history and the absence of other causes. Pregnancy seems to favor the development of tuberculous peritonitis. There is comparatively little disturbance in the menstrual function; menorrhagia is not so common as in other forms of chronic salpingitis. Dysmenorrhœa is certainly a common symptom in tuberculous salpingitis, but the absence of pelvic pain is considered worthy of note. Some writers have laid great stress on the nodular feel of the diseased tubes, such nodules often being in close relation to the uterus and may justify the suspicion of tubercle, though we would have to exclude malignant disease. Lastly, when the disease is affecting the uterine cavity it may be possible to detect the tubercle bacilli in the discharges or discover the structure of tubercle on microscopic examination of the uterine curettings. Whether or not it is wise to attempt removal of caseous tubes when surrounded by dense adhesions further experience must decide, but there is no doubt that tuberculous pyosalpinx can be best treated by abdominal resection. The dangers of laparotomy are adhesions of the bowel to the abdominal wall, the density of the fibrous adhesions around the appendages, the rottenness of the bowel and tissues generally and the risk of fecal fistula. When the uterus is affected its tissues are easily torn and dilating and curetting may cause serious ruptures.

Kynoch describes primary tuberculosis of the cervix, recognizing the ulcerative form of miliary tuberculosis representing the early stage of ulceration and the papillar form involving the cervix endometrium and extending into the vaginal process, red and bleeding, soft and non-friable, and in these respects differing from epithelioma. He reports a case and remarks that such localized tuberculosis is more frequent than is generally supposed. The symptoms are not satisfactory for diagnosis. In the absence of tuberculosis elsewhere with the surrounding parts apparently healthy, hysterectomy is the best treatment. Palliative treatment should be reserved for cases that are obviously secondary to active tuberculous lesions elsewhere.

5. Prostatectomy.—Freyer continues his article, reporting additional cases. Of the 51 completed cases, 46 have been perfect successes, the patients continuing to be well. There has been no permanent fistula, contraction at the site of operation, stricture or dangerous hemorrhage during or after operation and no case of septicemia, which is remarkable, considering that the bladder was septic before operation. He suggests that persons that survive to a condition in which these cases are when operated on, become more or less immune by the gradual absorption of toxins and thus do not become septic. There were 5 deaths out of the 51 cases; 2 from mania after the wound had healed and the urine was being passed naturally; 1 from heat stroke during convalescence, 1 from coma from retention of morbid products which had set in before the operation and 1 from pneumonia seven days after operating. In only one of the cases could the fatal results be attributed to the operation. In his last 19 completed cases there has been no such accident. He remarks on the frequency of mental disorder among persons suffering from prostatic disease and says that more than ordinary risk is attached to an operation of any kind in such cases from its being likely to accentuate the mental symptoms.

6. Erb-Duchenne Paralysis.—Tubby has attempted to relieve this condition by splicing the muscles, attaching the triceps to the biceps and thus enabling flexion of the arm to be secured. The replacement of the paralyzed deltoid is more difficult, but he has used for this purpose the clavicular portion of the pectoralis major and that part of the trapezius attached to the clavicle. These cases promise better results. An important point after muscle-grafting operations of any kind is that the grafted muscle must never be put on the stretch for at least a month, and then it must still be kept under control, and very gradually be allowed to attempt to perform its full function.

8. Club-Foot.—Phelps' operation for club-foot, which was severely criticised when presented before the British Medical Association in 1900, is strongly advocated by Little. He varies it slightly by dividing the tendo Achilles last and using a skin flap which has also been employed for this purpose by Jonas of Omaha. He does not put the foot in gypsum immediately after operation as oozing occurs and a bulky dressing is required which prevents a good hold on the foot being obtained, and also because blood-stained dressings are likely to be irritating. He illustrates his paper, showing his results. He has never had serious trouble from scar and if the skin flap is employed this is avoided. He is convinced that there is no ground for fearing recontraction or relapses. The chief danger, he thinks, is in the production of flat-foot. To secure good results it is absolutely necessary to keep the fore part of the foot fully abducted and the inner border stretched from the time of operation until the wounds are soundly healed. His conclusions are:

1. In selected cases Phelps' operation is of great value. A skin flap should always be made. 2. Osteotomy as a part of the operation is rarely necessary. 3. The operation is contraindicated in young children because of the difficulty of predicting what the ultimate result of growth and pressure may be and the danger of severe flat-foot following. 4. If, for reasons of expediency, cases must be operated on young, and flat-foot result, the patient is far better off than if he had a relapsed or partly curved varus.

9. Cystic Tumors of the Mammæ.—Snow holds that many of these cystic tumors are simply milk engorgements which

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can be milked out by forcible massage and thus do away with the necessity of operation.

11. **Gastric Ulcer.**—Moullin advocates operation in chronic gastric ulcer and in every possible case he favors dealing with the ulcer directly in preference to gastrojejunostomy. Posterior gastrojejunostomy, especially with lateral anastomosis between the two sides of the intestinal loop, is, however, an excellent operation. If the ulcer is multiple; near the pylorus or cardia or if it is too large or deep, or if it has contracted such dense adhesions that removal is impracticable, gastrojejunostomy may be the only resource. The ideal method is excision. The success depends on whether the operation is a preventive against future trouble or used as a last resort. Of the former class he has had 23 cases, with but 1 death, and of the latter, 15 with 5 deaths. Two of these fatal cases were almost moribund at the time of operating, and the others were more or less hopeless.

12. **Surgical Tuberculosis.**—Deanesly advocates the open-air treatment for surgical tuberculosis and claims that every hospital should be provided with facilities for treating patients in the open air.

The Lancet, London.

October 17.

13 The Importance of Post-Graduate Study. William S. Church.
13½ Charles White, F.R.S.: A Great Provincial Surgeon and Obstetrician of the Eighteenth Century. Charles J. Cullingworth.
14 The Quantitative and Qualitative Relations of Toxin and Antitoxin. E. F. Bashford.
15 A Case of Upward Dislocation of the Foot. Percy W. G. Sargent.
16 Note on a Case of Renal Calculus. H. E. Bruce Porter.
17 *The Treatment of Sciatica. J. Mitchell Clarke.
18 A Case of Infantile Acute Eczema; Hematemesis; Duodenal Ulcer; Death. Hugh H. Borland.
19 Three Cases of Perforated Gastric Ulcer; Recovery After Operation. Frederick C. Wallis.
20 A New Ethyl Chlorid Apparatus and Method. G. W. B. Daniel.
21 *On the Etiology of Bubonic Plague: An Epidemiologic Contribution. J. Ashburton Thompson.

17. **Sciatica.**—The Weir Mitchell treatment by rest and a long splint is advocated by Clarke, who has found it successful in the severer cases of sciatica that have come under his care. Out of the last 12 consecutive cases of severe sciatica 10 patients were cured, 1 had a relapse but was cured by a second course of treatment. One could have been relieved, but he was restless and impatient and it was impossible to keep the splint on. The restraint of the splint is rather inconvenient for the first day or two, but later is more endurable. Gastric affections must be looked after by careful feeding and a light diet is better in all cases at first. Care must be taken that the bed is flat and even and that there is a firm basis of support under a flat mattress. The limb must be absolutely at rest; this is essential to treatment. A short course of massage, tonics and cod-liver oil is an aid to complete cure.

21. **Bubonic Plague.**—Thompson finds from experience with plague at Sydney, Brisbane and Port Elizabeth that the transmission of plague must be through the skin and that the best carrier that meets all the requirements is the flea. The objections to this theory are reviewed and answered. He admits that infection by occasional contact is possible, but says that the chances against it are so many that it can not be relied on as a cause of an epidemic.

Australasian Medical Gazette, Sydney.

September 21.

22 Mechanism of the Paroxysmal Neuroses. Francis Hare.
23 A Case of Recurrent Paralysis of the Third Nerve. Sinclair Gillies.
24 Diabetes. (Continued.) C. Belasmann.
25 *Two Hundred Cases of Appendicitis. H. Critchley Hinder.
26 The Protean Methods of Hydatids. A. S. Joske.
27 The Surgical Treatment of Senile Enlargement of the Prostate. W. Anstey Gilles.
28 Notes on Three Cases of Scirrhus of the Breast. Robert Scott.
29 *Short Notes on the Radical Cure of Umbilical Hernia. C. E. Todd.

25. **Appendicitis.**—Hinder advocates operation and thinks recovery from general peritonitis depends on the rapidity with which patients are submitted to operation. He agrees with the theory that appendicitis is usually caused by interruption of the outflow of the mucous secretion of the organ and that this interruption is caused primarily by a congenital narrowing near the cecal end of the appendix. This becomes a complete blockage from causes arising within or without the organ, for example, a concretion thus produced causes inflammation which effectually closes the already narrow outlet.

29. **Umbilical Hernia.**—Todd emphasizes the importance of not opening the hernial sac from the outside if it can be avoided; also that an abdominal incision should be made well away from the bulging; whether above it or to one side matters very little. The first incision should be long to give room to examine the structures. He says that operation in the early stages would save many fat and elderly women much trouble.

Intercolonial Medical Journal of Australasia, Melbourne.

September 20.

30 A Retrospect of Personal Experience of the Treatment of Post-Nasal Growths. T. K. Hamilton.
31 Same title. A. J. Brady.
32 Same title. J. Lockart Gibson.
33 Personal Experience of Post-nasal Adenoids and Their Treatment. James W. Barrett.
34 The Medical and Surgical Treatment of Spasmodic Torticollis, with an Illustrative Case. Robert B. Duncan.
35 The Determination of the Arterial Blood Pressure in Clinical Practice. C. J. Martin.
36 A Case of Anorexia Nervosa, which Later Developed Myxedema, Followed by Safe Parturition. J. W. Dunbar Hooper.

Annales de Dermatologie et de Syph., Paris.

Last indexed page 982.

37 (IV, Nos. 8-9.) *L'histo-pathogénie du psoriasis. G. Verrotti (Naples).
38 *Histologie du lichen chronique circonscrit (neurodermite circonscrite). E. Dalous (Toulouse).
39 *Abcès sous-cutanés multiples d'origine mycosique. de Beurmann and Ramond.
40 Gangrene of Nose in Tertiary Syphilis. F. Balser and C. Fouquet.—Sphacèle de l'extrémité du nez dans un cas de syphilis tertiaire accompagné de la maladie de Raynaud.
41 Pahycténose récidivante des extrémités. R. Bodin. Case cases.

37. **Histopathogenesis of Psoriasis.**—Verrotti's article is a presentation of arguments in favor of the conception that psoriasis commences primarily as a congestion, involving the entire derma. It assumes later the character of an inflammation in the papillary and subpapillary layers, causing a series of changes in the rete mucosum by the degeneration of the vacuoles and reactive proliferation, the resulting product of which is parakeratosis. He proclaims that the conception of a toxemia as presiding over the production of the cutaneous lesions in psoriasis is justified by the nature and the evolution of the histologic changes.

38. **Histology of Chronic Circumscribed Lichen.**—Dalous describes 2 cases very carefully studied and announces his opinion that this affection may be defined as a peripheral neuritis of central origin.

39. **Subcutaneous Abscesses of Mycotic Origin.**—The patient was a man of 37 who exhibited thirty-five small tumors irregularly distributed over his body and head, the face exempt. The tumors were only slightly painful under palpation and in appearance suggested hydatid cysts, but each contained pus resembling that of tubercular lesions. A mould fungus was derived from the abscesses, which did not prove pathogenic for animals, but autoinoculation from the abscesses reproduced them on the subject. Energetic treatment with potassium iodid was followed by the complete retrogression of all the tumors in about six weeks.

Bulletin de l'Académie de Médecine, Paris.

42 (LXVII, No. 31.) Sur l'organisation et le fonctionnement de l'assistance medicale indigène à Madagascar, 1902.
43 *De la tuberculose articulaire et abarticulaire et des séries morbides parallèles. C. Fernet.

43. **Tuberculosis of the Joints.**—Fernet's experience has confirmed that of others in regard to the manifestations of tuberculosis in the joints. They may assume an acute or chronic form, and they resemble in many respects those of articular rheumatism. They have been called, therefore, tuberculous rheumatism, tuberculous pseudo-rheumatism, etc., but he protests against these appellations as indicating a relationship to rheumatism which does not exist. It is more correct to say articular tuberculosis just as we say pulmonary tuberculosis. In other words, the tuberculosis may manifest itself in morbid

series which parallel those of acute or chronic rheumatism in their localization in the joints or elsewhere. But the lesions have nothing in common except their site. They differ in causation, pathologic anatomy and in their symptoms. They should, therefore, be differentiated and entitled differently.

Presse Médicale, Paris.

44 (No. 80.) *La chlorurémie et la cure de déchloruration dans le mal de Bright. F. Widal and A. Javal.
45 *Les syndromes scissaires expérimentaux. L. Lavastine.
46 (No. 81.) *Etude clinique sur l'ictère syphilitique. F. Simionescu (Bucharest).
47 La diazo-réaction d'Ehrlich dans la tuberculose pulmonaire chronique. H. Hamant and A. Gorin.
48 (No. 82.) Les sanatoriums de Leysin, 1902-3. M. Morin.
49 Appendicocèle extra-péritonéale et appendicite herniaire extra-péritonéale. F. Guibal and E. Roland. One case and review of 7 in the literature.

44. Chloridemia and Treatment of Bright's Disease by Dechloridation.—The details of careful study of 6 patients treated by dechloridation are given and one case is tabulated with all the particulars. Widal's announcements in regard to the importance of a salt-free diet in nephritis have been reviewed in these columns as published with editorial comment last week. He proclaims that it is absolutely necessary to know the variations in the "salt equilibrium" in a nephritic patient before treatment can be intelligently instituted. He measured the amount of salt ingested and eliminated, keeping close watch of the weight of the patient. By this means it is possible to note the onset of what he calls the pre-edema period. When the results of these tests showed that the kidney was impermeable for salt, then he administered various diuretics, allowing several days to each period and to the intervals. He found digitalis incapable of inducing diuresis when the renal lesion is not complicated by cardio-vascular troubles. The edema in Bright's disease is not produced, like cardiac edema, by insufficiency of the vascular apparatus, but merely by the lack of permeability on the part of the kidney to sodium chlorid. Theobromin is the heroic remedy for this condition; it opens the sluices of the kidney and by re-establishing the outward flow of the chlorids frees the organism of the chlorids which have been retained in it, and eliminates with them the retained water in the saving polyuria. No other diuretic can be compared with it, and its efficacy in pure Bright's disease confirms the assumption that the cause of the retention of fluids causing the edema lies in the kidneys. Sodium chlorid is probably not the only substance arrested by the diseased kidney, but it is the one whose retention is the cause of the chief troubles. As it accumulates in the tissues it raises the index of the concentration of their juices, and this in turn attracts the water to restore the balance. As salt is thus responsible for the disturbances its intake must be restricted. Many persons with Bright's disease improve and thrive on a mixed diet containing meat, bread, sugar, potato and butter so long as no salt is given with them. Milk contains too much salt for large quantities to be advisable in severe cases. Clinical experience is confirming more and more the value of this method of dechloridation when the impermeability of the kidney for salt has been determined by the alimentary salt test or otherwise. It is usually sufficient alone to free the patients from edema, but may be supplemented by use of theobromin or theocin when more rapid action is desired. They owe their efficacy to their power of rendering the kidney permeable to salt. As the salt is eliminated the water retained to hold it in solution escapes with it.

45. Experimental Solar Syndrome.—Lavastine remarks that we can detect a "solar note" in certain perturbations of the visceral functions. He has reproduced them experimentally and shows that an organic lesion is not necessary—a mere perversion in the solar regulating mechanism is sufficient to throw one or more of the viscera out of gear. Insufficiency of the liver may be due to this cause, as well as some of the symptoms noted in lead poisoning, peritonitis, etc. A number of affections hitherto classified by their pathologic anatomy are in reality merely manifestations of derangement of the solar plexus. The syndrome of acute solar paralysis is realized in peritonitis; the syndrome of acute solar irritation is seen in lead poisoning; the subacute and chronic forms of irritation are seen in lead poisoning entailing paralysis of the solar plexus, and also in muco-membranous colitis in nervously irritable subjects. The fourth form of solar pathology he calls the syndrome due to irradiation: death may follow a blow on the abdomen, or ingestion of ice affecting the stomach like a traumatism, and arrest of the heart in diastole observed in liver or kidney colic is due to this cause. Potain witnessed a case in which the pulse was slowed by the influence of the solar plexus. The possibility of a solar factor should, therefore, be thought of in certain syndromes involving the viscera.

46. Syphilitic Icterus.—Simionescu ascribes to syphilis every case of icterus observed in a syphilitic subject presenting secondary manifestations—unless there is proof to the contrary. All syphilitics do not present the symptoms of icterus, as individual predispositions differ. He describes 4 cases. The icterus subsided under specific treatment.

Semaine Médicale, Paris.

50 (No. 40.) Contribution à l'étude du mécanisme des mouvements volontaires et des fonctions du faisceau pyramidal. G. Marinesco.
51 *Diagnostic Sign of Twin Pregnancy. I. Levinovitch.—Un signe susceptible de faciliter le diagnostic de la grossesse gémellaire.
52 Letters from America. F. Munch.—Sur la désinfection chirurgicale, and La chloroformisation et l'éthérisation aux Etats-Unis.

51. Sign of Twin Pregnancy.—In a normal pregnancy the uterus develops retaining its spherical outline, but in case of twin gestation the tendency is to develop more laterally. The fetuses are usually arranged side by side and the distension in the transverse diameter reduces the traction on the round ligaments until they become much shorter and looser. These ligaments share in the general hypertrophy of the uterus during a pregnancy and they can be readily palpated in a normal gestation. The determination of these ligaments by palpation as a round, prominent ligament under considerable tension, excludes the idea of a twin gestation.

Revue de Gynécologie, Paris.

Last indexed page 898.

53 (VII, No. 4.) *The Blood in Case of Ovarian Cysts. X. Bender.—Recherches sur l'etat du sang dans les kystes de l'ovaire.
54 Recherches sur les altérations séniles des vaisseaux sanguins et sur le tissu de l'utérus. H. Szasz-Schwarz.
55 Actinomycose de l'appendice vermiforme. M. Letulle.

53. The Blood in Case of Ovarian Cysts.—Bender gives the blood findings in 23 cases of various kinds of ovarian cysts and proclaims that it is possible to determine the benign or malignant character of the cyst by examination of the blood. The neoplasm is certainly non-malignant if the whites do not number more than 6,000 to 8,000. When the proportion of reds is normal, the presumption is against malignancy even in case of considerable leucocytosis. Only when the reds are below normal and the whites materially increased, are we justified in assuming malignant cancerous degeneration.

Revue de Medecine, Paris.

Last indexed page 818.

56 (XXIII, No. 8.) L'hygiène du baiser (of the kiss). C. Féré.
57 *The Tonsils and Uvula in the Tuberculous. E. E. Escomel.—Les amygdales palatines et la luette chez les tuberculeux.
58 Sur la lésion dite sténose congénitale de l'aorte dans la region de l'isthme. L. M. Bonnet. (Commenced in No. 2.)

57. The Tonsils and Tuberculosis.—Escomel regards the tonsils as "the most tuberculizable organs in the entire digestive tract." He found them the seat of tuberculous lesions in 21 out of 25 cadavers of consumptives examined. In 11 non-tuberculous cadavers the tonsils were intact. In the tuberculous cases the follicles almost always contained other parasites, which may have favored the lodgment and growth of the tubercle bacilli.

Archiv f. Gynäkologie, Berlin.

Last indexed page 1063.

59 (LXIX, No. 3.) *Regeneration of Uterine Mucosa After Childbirth. E. Wormser (Basle).—Die Regeneration der Uterusschleimhaut nach der Geburt.
60 Non-formation of Decidua in Phosphorus Poisoning Outside of Pregnancy. F. Hitschmann and O. T. Lindenthal.—Zur Frage der Deciduabildung bei Phosphorvergiftung.

61 *Der weisse Infarkt der Placenta. J. Hitschmann and O. T. Lindenthal.
62 *Beitrag zur Kenntnis des Corpus-Carcinoma. F. Hitschmann.
63 Das Vorkommen von Decidua in der Cervix. R. Volk (Schauta's clinic, Vienna).
64 Secondary Abdominal Gestation in a Rabbit. A. Sittner (Brandenburg).—Abdominal Bauchschwangerschaft beim Kaninchen.
65 Study of 1,000 Neonatorum in the First Days of Life. H. Hirschl (Prague).—Ueber die Gesundheitsverhältnisse bei 1,000 Neugeborenen in den ersten Lebenstagen.
66 The New Gynecologic Clinic at Dresden. G. Leopold.—Zur Eröffnung der neuen k. Frauenklinik in Dresden.
67 *Correction. L. Bossi.—Berichtigung.

59. Regeneration of Uterine Mucosa After Childbirth.—Wormser gives a number of illustrations to show the various processes of regeneration. By the end of the third week he found all the elements of the mucosa approximately normal. His monograph of 126 pages reviews 53 other published communications on the subject.

61. White Infarct in the Placenta.—These writers argue that the so-called white infarct is rather of the nature of a thrombosis.

62. Study of Corpus Carcinoma.—Hitschmann warns that every manifestation of epidermis formation in the mucosa of the uterus deserves attention, even if there is no evidence of tumor formation. He thinks there are no grounds for the assumption of a psoriasis or ichthyosis uterina, but metaplasia of the columnar into pavement epithelium is a frequent accompaniment of adenocarcinoma of the fundus. He reviews his findings in 7 typical cases and in 3 of pure epithelioma, all of the fundus.

67. Instrumental Dilatation.—Bossi proclaims that experience is demonstrating that instrumental dilatation is especially indicated for primiparæ and in case of entirely unshortened cervix, when rapid delivery is required in eclampsia, etc.

Beiträge zur klin. Chirurgie, Tübingen.

Last indexed page 885.

68 (XXXIX, No. 1.) Ueber das Rhinophyma. P. von Bruns (Tübingen). Eleven cases.
69 Enlargement of Bony Nose by Mucous Polypi. Burck.—Verbreiterung der knochernen Nase durch Schleimpolypen.
70 *Zur operativen Behandlung der Darm-Invagination über dem Prolapsus intestini invaginati. E. Hofmeister.
71 Zur Kasuistik der Bauchblasengenitalspalte (exstrophy of bladder). C. Bianel. One case.
72 *Pneumokokken-Peritonitis als ein typisches Krankheits-Bild. M. v. Brunn.
73 *Experiences with Posterior Gastroenterostomy. Trendel.—Ueber die mit der Gast. post. in der Tübinger Klinik gemachten Erfahrungen.
74 *Zur Anatomie und Pathologie des Pankreas und der Gallenwege (biliary passages). O. v. Büngner (Hanau).
75 Inkarseration des Wurmfortsatzes (of appendix). Schöne.
76 Cure of Case of Rhinoskleroma with X-Rays. O. Fittig (Breslau).—Ueber einen mit Röntgenstrahlen behandelten Fall von Rhinosklerom.
77 *Operative Treatment of Cancer of Stomach at Krönlein's Clinic, Zurich. Schönholzer.—Chirurgie des Magenkrebses an der K.'schen Klinik von 1881 bis 1902.

70. Operative Treatment of Invagination of Intestines.—Hofmeister relates a number of interesting cases from von Bruns' clinic. He advocates resection of the invaginated portion as the standard procedure, and recommends a modification of von Frey's technic. The operation is certain and rapidly done. The afferent intestine is drawn out and divided. The proximal stump is closed with a suture. The peripheral stump is allowed to slide down into the invagination funnel; then follows a lengthwise incision in the invaginatum a few inches below the turned-over part. A ligature is applied as high up as possible, and the inner cylinder is resected, after which the stumps are united by side anastomosis, utilizing the lengthwise incision mentioned above. He gives diagrams to illustrate the technic.

72. Pneumococcus Peritonitis.—Brunn analyzes 2 cases personally observed and 56 in children that have been reported in the literature with 15 in adults, and a number of others that lack bacteriologic confirmation. The prognosis is favorable. Spontaneous healing is possible but rare; treatment should consist in evacuation of the abscess by a broad opening with drainage. The diagnosis is based on the fibrinous plastic exudate, which is promptly walled in by adhesions, causing symptoms of acute peritonitis followed soon by a chronic stage with comparatively mild peritonitic symptoms. The pus is a greenish yellow, abounding in fibrin.

73. Experiences with Posterior Gastroenterostomy.—Trendel states that only 21.4 per cent. of 28 patients operated on at Tübingen succumbed within four weeks, and only 18.2 per cent. in the 269 cases of the united statistics of Czerny (215), Steinthal (26), and von Bruns (28). No instance of pure stomach ileus was observed. He uses a short loop and the Murphy button. The button was successfully applied in all but 3 cases, but in a fourth it dropped into the stomach and was the cause of fatal after-hemorrhage.

74. Anatomy and Pathology of Biliary Passages.—Büngner found that the common bile duct passed through the head of the pancreas in nearly every one of the 56 cadavers examined. In only 5 per cent. did it pass to one side. He also found that this duct and the pancreatic duct open with separate orifices in the floor of the diverticulum of the papilla. All affections which entail enlargement or shriveling of the head of the pancreas must cause constriction not only of the pancreatic duct but also of the common bile duct. An affection of one duct does not necessarily entail involvement of the other.

77. Surgery of Gastric Cancer at Zurich.—Of the 264 cases observed, 67 were not operated on; in 73 an exploratory laparotomy was alone attempted; 74 were treated by gastroenterostomy and 50 by resection. Of the inoperable cases 51 lived on an average 73 days afterward. The 14 patients declared operable but who refused surgical intervention, lived an average of 200 days. Heredity was noted in 13 per cent. The mortality of exploratory laparotomy proved to be 9.5 per cent. The mortality in the 74 cases in which gastro-enterostomy was done was 24.3 per cent. It is indicated, Krönlein believes, in cases of inoperable carcinoma of the pylorus with actual stenosis. The retrocolic method shows a mortality of only 16 per cent., and hence seems to be preferable to the Wölfler operation. He uses brief ether narcosis for the cutaneous incision, completing the operation without further anesthesia. The gastro-enterostomy prolonged life on an average for 100 days. In 17 cases the patients were relieved to such an extent that life was prolonged for an average of 410 days. In 17 others the average survival was for 141 days, and in 21 for 64 days. The details of the 74 cases of gastro-enterostomy are related, filling 112 pages. In 56 of the 74 cases the stomach had never given trouble. In 3 there had been a preceding ulcer, and in 7 there had been no vomiting. The first symptoms appeared on an average nine months before the operation; in 9 cases only three or four months had elapsed. The most important diagnostic sign is the emaciation. It was constant, and frequently the first symptom that brought the subjects to the physician, when no other symptoms were apparent except possibly loss of appetite and eructations after meals. The patients in many instances had never thought of their stomach in connection with the emaciation and neither did the physician, but instituted treatment of the assumed anemia, etc. The facts observed emphasize the importance of systematic weighings, and the loss of much important information by the usual neglect of this. Symptoms of any stomach trouble, no matter how apparently benign, if accompanied by emaciation, should suggest the possibility of cancer, and exploratory laparotomy is indicated. The progress of the emaciation is also an important sign. If the subject with a stomach affection loses thirty pounds in a few days the trouble is probably a benign stenosis of the pylorus, while the same loss of weight occurring in the course of six months is presumptive of cancer. In 60 of the 74 cases the gastric secretions were tested and no free hydrochloric acid could be detected in 54, while it was present in the rest, and all exhibited motor insufficiency. In one a cherry stone was found in rinsing the stomach that must have sojourned there for two months. Krönlein's experience confirms the view that cases of carcinoma of the pylorus in which extirpation is impossible, are the most satisfactory subjects for gastro-enterostomy.

Jahrbuch f. Kinderheilkunde, Berlin.

Last indexed page 1120.

78 (LVII, No. 5.) Ueber Pemphigus contagiosus. E. Hagenbach-Burckhardt (Basle).

79 *Das Diphtherie-Heil-Serum, seine Wirkungsweise und Leistungsgrenze bei Larynx-Stenose. Wieland (Ibid.).
80 *Ueber paroxysmale Hemoglobinurie. E. Burckhardt (Ibid.).
81 Treatment of Club-Foot at Basle. W. Armann.—Die Behandlung des kongenitalen Klumpfusses an der Poliklinik des Basler Kinderspitales.

79. Antidiphtheria Serum.—Weiland's article was prepared as a thesis. He ranks the local inhibiting influence of the serum far above its antitoxic action. His experience confirms that of others that serum treatment has more chances of success in the more gradual, protracted cases than in those with tempestuous rapid course.

80. Paroxysmal Hemoglobinuria.—Burckhardt had occasion to study a case of this affection in a six-year-old boy, and became convinced that the attacks were brought on by congestion or chilling in every instance. The blood serum did not seem to possess a hemolytic action outside of these attacks.

Monatsschrift f. Geb. und Gyn., Berlin.

Last indexed XL, page 1168.

82 (XVII, No. 6.) *Incision of Fascia Above Symphysis. Menge (Leipsic).—Ueber den suprasymphysären Faszienschnitt nach Pfannenstiel.
83 *Rupture of Uterus and Its Mechanism. E. Knauer (Gras).—Einige seltene Fälle von Gebärmutterzerreissung mit bes. Berücksichtigung der Mechanik der Zerreissung.
84 *Dilatation of Cervix According to Bonnaire. R. J. T. Meurer (Amsterdam).—Ueber schnelle Erweiterung des Muttermundes nach Bonnaire.
85 *Functional Capacity of Mammary Glands and Indications and Contraindications for Breast Nursing. A. Schlossmann (Dresden).—Ueber die Leistungsfähigkeit der weiblichen Milchdrüsen und über Indikationen und Kontraindikationen zum Stillen.

82. Advantages of the Oblique Arc Incision.—Menge has opened the abdomen by Pfannenstiel's technic in 62 operations and ascribes certain advantages to it over the ordinary vertical incision. If the wound heals by primary intention there is no danger of hernia, but it is liable in case of suppuration. His patients made a smooth recovery in all but 4 cases. The scar is almost imperceptible or is hidden by the hair, and the elastic strain of the abdominal muscles keeps it linear. There does not seem to be the slightest tendency to callus formation or pigmentation at this point. He uses dry asepsis and cumolized catgut, and thinks this incision is preferable for many operations on the internal genitalia in which the uterus is to be retained.

83. Mechanism of Rupture of Uterus.—Knauer has recently observed a case in which a bunch of caseous lymph glands prevented the passage of the fetal head into the pelvis. This entailed such distension of the lower segment of the uterus that it ruptured. A hematoma developed, causing in turn such distension of the peritoneum that this also ruptured. The patient succumbed to subsequent peritonitis. In 3 other cases in which the placenta was prematurely detached, the internal hemorrhage caused distension which finally ruptured the uterus wall and peritoneum, the latter in several places. He does not know whether the tissues were previously weakened, but he points out that every case of sudden distension of the uterus with progressive anemia and no external escape of the hemorrhage should suggest the possibility of impending rupture and these fissures in the peritoneum.

84. Dilatation of Uterus According to Bonnaire.—Meurer has been well satisfied with the results in 29 cases in which dilatation was accomplished by Bonnaire's technic.

85. Indications and Counterindications for Breast Nursing.—Tuberculosis in the mother can scarcely be regarded as a contraindication to nursing her child. The danger of infecting the infant by other means than the milk is far more probable than the danger of transmitting infection in the milk. The tuberculous mother does not seem to suffer from exercise of the mammary function, but a tuberculous wet nurse is out of the question. When tuberculosis is suspected in a wet nurse and the response to tuberculin is negative, several weeks of observation are necessary to fully decide the question. An injection of tuberculin does not affect the mammary secretion nor the nursling. Schlossmann advises leaving the child at the breast during a mastitis if no pus cocci are found in the milk. If the milk contains pus cells the breast should be treated, but the infant can still nurse the sound side. He adds that there are no absolute contraindications to breast nursing, but in individual cases it may sometimes be necessary to decide whether it is best for the mother to nurse her child or not.

Therapeutische Monatshefte, Berlin.

Last indexed page ∞.

86 (XVI, No. 6.) Ueber Veronal. W. Berent.
87 Dress Reform. Schaeche.—Zur Frage der Reformkleidung.
88 Study of Certain Oils. K. Herxheimer.—Ueber die dermatotherapeutische Verwendung einiger Oele.
89 Zur Kenntnis einiger Morphin-Derivate. A. Mayor.
90 *Industrial Inhalation of Fumes of Phosphoric Acid. Böttrich. Ueber die gesundheitliche Bedeutung des Aufenthaltes in den Formierräumen von Akkumulatoren-Fabriken.
91 Electro-magnetic Treatment of Sciatica. P. Krefft.—Zur Ischias-Behandlung.
92 Zur aseptischen Tamponade der Nase, etc. E. Fink.
93 Ueber ein ex tempore bereitetes Eisenwasser (iron solution). W. Jaworski.

90. Benefit to Health from Fumes of Phosphoric Acid.—When a person unaccustomed to the fumes of phosphoric acid enters the room in which storage batteries are made, he is almost suffocated. Böttrich has been engaged for fifteen years in supervising the health of the employes in a large factory of this kind at Hagen, examining the men every week. In the making of the storage batteries the employes are apparently exposed to severe irritation of the respiratory organs from the fumes of the acid, and also to the danger of lead poisoning. In all his experience, however, he has never encountered a typical case of lead poisoning among the 45 to 60 men constantly employed at this work, some for as long as ten years. He has also been impressed by the fact that the mucosa of the upper-air passages is unusually sound and resistant. Not a single case of tuberculosis is known among the men and catarrhal affections seem to subside in a remarkably brief time. Several of the men who entered on the work with pulmonary tubercular lesions have regained their health while employed in the storage battery rooms. The general health of the men averages twice as high as that of a similar body of men engaged in a neighboring iron works where railroad supplies are made. He has been so impressed with the salutary effects observed that he suggests the therapeutic application of the fumes of acids used in the preparation of storage batteries. The same conditions could easily be produced elsewhere than in a factory, and he thinks the facts observed justify attempts in this line.

Zeitschrift f. klinische Medizin, Berlin.

Last indexed page 827.

94 (L, Nos. 1-2.) *Pathologisch-anatomische Studien für die klinische Diagnostik des hemorrhagischen Lungen-Infarktes. E. Tiedemann (Berlin).
95 *Klinische und experimentelle Beiträge zur Leukemie-Frage. P. Reckseh.
96 *Lead Colic. M. Mosse.—Zur Kenntnis der experimentellen Bleikolik.
97 Zur Histogenese der lymphatischen Leukemie. Ibid.
98 Schwere Knochenerkrankung im Kindesalter. Osteomalacie? Rhachitis? E. Roos (Freiburg).
99 *Subcutaneous Feeding with Fat. H. Winternitz (Halle).—Zur Frage der subkut. Fetternahrung.
100 Beiträge zur Lehre vom muskularen Kardiaverschluss. F. Sinnhuber.
101 Ueber das Distomum Ringeri (Cobbold). Z. Inouye (Chiba, Japan).
102 Urate Deposits in Tissues. K. A. Krause.—Zur Kenntnis der Uratablagerungen.
103 *Ueber Antistreptokokken-Serum. F. Meyer (von Leyden's clinic, Berlin).
104 *Urobilin in Stomach. A. Braunstein (Ibid.).—Ueber Vorkommen und Entstehung von Urobilin im menschlichen Magen.

94. Diagnosis of Infarct in Lungs.—Tiedemann remarks that the pathologic anatomy of infarct in the lungs indicates that if the hemorrhagic infarct is situated near the surface the resonance will be deadened over the spot. Sometimes there is a tympanitic resonance, owing to the vibrations of the air in the bronchi and the relaxation of the adjacent lung tissue. The vocal fremitus is increased except when the infarct is so large as to exert pressure on the chest wall. The infarct was found in the right lower lobe in 15 cases; in the right upper in 7; in left lower lobe in 5; left upper in 4, right median lobe in 2, and once in the left apex. The presence of a cardiac defect or other trouble entailing disturbances in the circulation is an important aid in the diagnosis. Râles may be audible as long as the alveoles are not entirely filled with coagulated blood, but after the infarct has developed, the sounds heard can pro-

ceed only from the pleura above it, from the bronchi or from the surrounding alveolar tissue. While it may be impossible to hear vesicular breathing over the infarct, yet the air-free tissue proves a good conductor for sounds originating in the adjacent bronchi. Circumscribed bronchial-tube breathing may, therefore, be regarded as characteristic. The infarct is usually shaped like a wedge, the broad end toward the pleura, about as large as a walnut or cherry.

95. **Leukemia.**—In one of the 7 cases of leukemia described there were malarial antecedents, in 3 trauma. Four were of the chronic lymphatic type and 2 of the mixed form. In one there was a combination of pernicious anemia with mixed-cell leukemia. In a case of almost pure lymphemia the proportion of lymphocytes to the polynuclear neutrophiles was 99/1. In a case of pseudo-leukemia the lymphocytes were somewhat increased with indicanuria and obstinate profuse sweats, but there were no neutrophiles. Reckzeh also mentions 2 cases of tuberculosis of the lymphatic glands in which the blood was almost normal.

96. **Experimental Lead Colic.**—Mosse found that it was possible to induce cellular alterations in the celiac ganglion similar to what are found in lead colic, by administering drugs which cause violent contraction of the intestines. These lesions in the ganglion are evidently the result of the violent muscular spasms in the intestine caused by the lead.

99. **Subcutaneous Oil Feeding.**—Winternitz administered fats in combination with iodin in subcutaneous injections. The fat thus taken was entirely absorbed and assimilated, but the organism is not capable of taking up more than 20 to 25 calories a day in this way, and months may elapse before a deposit of 500 gm. is entirely absorbed. Not more than 2 to 3 gm. is absorbed during the twenty-four hours even under the most favorable circumstances.

103. **Antistreptococcus Serum.**—Meyer has been testing the various serums of this kind and finds that Aronson's is the only one that absolutely protects animals against several times the otherwise fatal dose, and cures after infection. The intravenous route was found far superior to the subcutaneous and intraperitoneal. The serum from 2 patients who had passed through severe streptococcus infection likewise proved to have protecting power to a certain extent, although very large amounts were necessary. Aronson's serum does not check the growth of streptococci *in vitro* nor attenuate their virulence, but they became very much less virulent when grown in the peritoneum of a protected rabbit. The streptococci probably become attenuated in the body of a protected animal, and thus fall an easy prey to the cells. All the tests showed that the earlier the injection is made after infection the better the results.

104. **Urobilin in Stomach.**—Braunstein's experiments demonstrated that urobilin is not found in the stomach except when the bile entering it already contains urobilinogen. The transformation of the latter into urobilin is promoted by hydrochloric acid. The urobilin in the stomach is thus of enterogenic origin, the same as that in the intestines.

Brazil Medico, Rio de Janeiro.

Last indexed XI, page 48.

105 (XVI, No. 43.) Observaçoes sobre a peste. Borel. (Concluded.)
106 (No. 44.) Nova contribucion ao estudo dos reflexos tendinosos na phase post-paroxystica da epilepsia. J. Moreira. (Concluded.)
107 (No. 45.) Xipho-thoracopago operado; o estado actual de Rosalina. Chapot Prévost (Rio).
108 (XVII, No. 1.) Cirurgia dos monstros duplos. Ibid. (Concluded.)
109 *Tratamento da erysipela. Brant Paes Leme.
110 *Tratamento das contusoes. Ibid.
111 (No. 3.) Notas acerca do impaludismo e da febre amarella. F. Fajardo. (Concluded.)
112 (No. 4.) *A sorotherapia na peste bubonica. A. Ferrari.
113 (No. 6.) *A estrychnina na physiologia experimental e no tratamento da febre amarella. A. Ferrari. (Concluded.)
114 (No. 9.) *Propagaçao da febre amarella pelos mosquitos. Jorge Pinto and others. (Concluded.)
115 (No. 10.) 2 casos de septicemia cryptogenetica. O. de Oliveira.
116 (No. 11.) Nervoses e psychoses ligadas a intoxicaçoes. Notas clinicas. M. Guimaraes.
117 (No. 12.) Notas clinicas sobre a grippe infantil. Ibid.
118 (No. 13.) O ozena na primeira infancia. N. da Rocha.
119 (No. 14.) *Therapeutica da febre amarella. O serum glycosado. M. Guimaraes.
120 (No. 17.) Etiologia infecciosa da hysteria. Um caso de astasia-abasia. H. Rezo. (Concluded.)
121 (No. 21.) Disposiçao segmentaria de certos signaes cutaneos na febre amarella (in yellow fever). A. Austregesilo.
122 (No. 22.) Antituberculosis Circular Issued By Board of Health.—Conselhos contra a tuberculose.
123 (No. 23.) Interpretaçao da integridade da musculatura intrinseca ocular na ophthalmoplegia nuclear. V. de Britto.
124 (No. 24.) *Experiments with Transmission of Yellow Fever by Mosquitoes. I. Bandi.—Sobre o valor das experiencias realisadas no Hospital de S. Paulo para demonstrar a veracidade da theoria da transmisao da febre amarella pelos pernilongos do genero "Stegomyia fasciata."
125 (No. 25.) O chloreureto de ethyla na cirurgia infantil. A. de P. Guimaraes.
126 Discussion of Prophylaxis of Yellow Fever at Fifth Brazilian Medical Congress.

109. **Treatment of Erysipelas.**—Paes Leme supplements the ordinary internal measures with a local spray of a concentrated ether solution of camphor and a spray of 1 per 1,000 solution of sublimate. The wound which is the starting point for the infection is treated antiseptically and sometimes the patch and the surrounding region are painted with iodin, which he also gives internally.

110. **Treatment of Contusions.**—The same writer applies 15 per cent. mentholized collodion to the contused region to reduce the superficial pain, and dry cupping in contusions of the thorax and shoulders.

112. **Serum Treatment of Plague.**—Ferrari's experience with serum treatment has been extremely favorable. He found that it acted rapidly, without local reaction, and the general reaction was transient and insignificant in most cases. The duration of the disease was much reduced and the reabsorption of the exudate in the infected ganglia was facilitated and hastened. His 56 cases had a mortality of 15.3 per cent., but 2 of the patients were moribund when first seen. The mortality of the severe cases was 22 per cent. and in 6 cases of the most serious form of secondary plague pneumonia only 33 per cent.

113. **Strychnin in Yellow Fever.**—Ferrari has found strychnin very useful in infectious diseases, especially in yellow fever.

114 and 124. **Transmission of Yellow Fever by Mosquitoes.**—The committee appointed to study this subject make a formal report of 3 cases in which men voluntarily allowed themselves to be bitten by mosquitoes previously infected for the tests. Each one of the 3 developed yellow fever after the due period of incubation, and in one it was very severe, in the others light. They regard the tests as completely verifying the experiences of the United States physicians at Havana. Bandi denies the typical character of the disease produced and claims that the tests were inconclusive.

119. **Glucosed Artificial Serum in Treatment of Yellow Fever.**—Guimaraes has only a single case to report but the benefit derived from the injections was so remarkable that he does not wait for further confirmation. The fluid used was a mixture of 200 c.c. of a 1 per 1,000 solution of sodium chlorid and 10 gm. of chemically pure glucose. He injected 10 c.c. at a time and the pulse dropped almost at once from 140 to 116, declining to 100, 96 and 84, while all the other symptoms rapidly subsided. He has treated in the same way a patient with toxemia from gin liver and the benefit was equally marked.

Medizinskoe Obosryenie, Moscow.

127 (LIX, No. 9.) Primary Echinococcus Cyst in Ovary. A. Kablukoff.—Pervitchno-odinotchnii ekhinokokk yaitchnika.
128 *Atropin in Intestinal Obstruction. V. V. Stavsky.—O primyenenii atropina pri neprokhodimosti kishek.
129 (No. 10.) Pseudoleukemia of the Skin. T. Gershun.—O psevdoleykemii kozhi.
130 *Esophagotomy for Foreign Body. P. I. Kusmin.—K Kasuistik narushnago syetchenlya plshtchevoda pri enorodnykh tyelakh v nem.

128. **Atropin in Intestinal Obstruction.**—Stavsky concludes from the study of the literature and from the remarkable results obtained in 4 cases in his own experience, that atropin is a most valuable drug in certain cases of acute ileus. He injected subcutaneously .003 gm. atropin, followed two hours later by half the dose. The record has been favorable in 49 cases and in 9 the ileus terminated fatally. Atropin certainly deserves a trial, he states, in every case in which operation is contraindicated for any reason.

130. **Esophagotomy for Foreign Body.**—Kuzmin advises immediate recourse to external esophagotomy when a large fish bone or other foreign body with jagged edges has lodged in the esophagus. The operation is very simple and can be done by even the country practitioner without difficulty. When the wall of the esophagus is not injured by attempts at extraction, the wound heals rapidly and fluid food can be taken in two days after the operation.

New Patents.

Patents of interest to physicians, etc., October 6 and 13:

740385. Electrotherapeutic appliance. William B. Bassell, Columbus, Ohio.
740519. Producing beverages. Frida Brandner, Brooklyn.
740801. Pill counting machine. William Brough, Baltimore.
740811. Chocolate dipping machine. Patrick J. Costello, Chicago.
740424. Producing compounds for disinfecting purposes. Robert G. Groppler, Berlin, Germany.
740855. Mercurous chlorid. Carl H. von Hoensle, near Dresden, Saxony, Germany.
740867. Invalid bed. Richard L. Johnson, Rolla, Mo.
740873. Apparatus for treating skin diseases, etc. Jakob Kjeldsen, Copenhagen, Denmark.
740010. Suppository. Alexander H. Peloubet, Newark.
740702. Acetylsalicylate of sodium. Bruno R. Seifert and F. R. Engelhardt, Radebeul, Germany.
740476. Artificial limb. John K. Shanaman, Annville, Pa.
740714. Apparatus for the medication of air. John Titus, Oyster Bay, and W. Titus, Old Westbury, N. Y.
741461. Pill machine. Ernest C. Clark, Detroit.
741248. Making acetate of soda. William M. Grosvenor, Edgewater Heights, N. J.
741345. Pessary. Leo Knopf, Burstadt, Germany.
741585. Producing glycerin and acidylated derivatives of aromatic bases and the product thereof. Oscar Liebreich, Berlin, Germany.
741521. Body support. William U. G. Martin, Indianapolis.
741411. Artificial leg. Ole P. B. Fold, Copenhagen, Denmark.
741371. Apparatus for the treatment of defective hearing. Guy C. Powell and A. D. Smith, Peoria, Ill.
741173. Sanitary urinal. John Beidel, Milwaukee.

Books Received.

Acknowledgment of all books received will be made in this column, and this will be deemed by us a full equivalent to those sending them. A selection from these volumes will be made for review, as dictated by their merits, or in the interests of our readers.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene and Other Topics of Interest to Students and Practitioners. By Leading Members of the Medical Profession Throughout the World. Edited by A. O. J. Kelly, A.M., M.D., Philadelphia, U. S. A. With the Collaboration of William Osler, M.D., Baltimore; John H. Musser, M.D., Philadelphia; James Stewart, M.D., Montreal; J. B. Murphy, M.D., Chicago; A. McPhedran, M.D., Toronto; Thomas M. Rotch, M.D., Boston; John G. Clark, M.D., Philadelphia; James J. Walsh, M.D., New York; J. W. Ballentyne, M.D., Edinburgh; John Harold, M.D., London; E. Landolt, M.D., Paris; Richard Kretz, M.D., Vienna. With Regular Correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Carlsbad. Volume III. Thirteenth Series, 1903. Cloth. Pp. 305. Price, $2. Philadelphia: J. B. Lippincott Co. 1903.

GENERAL PATHOLOGY, or the Science of the Causes, Nature and Course of the Processes of Disease. By Dr. Ernest Ziegler, Professor of Pathological Anatomy and of General Pathology in the University of Freiburg, Greisgau. Translated from the Tenth Revised German Edition (Gustav Fischer, Jena, 1901) and Edited by Alfred Scott Warthin, Ph.D., M.D., Professor of Pathology and Director of the Pathological Laboratory in the University of Michigan, Ann Arbor, Mich. Profusely Illustrated. Cloth. Pp. 760. Price, $5. New York: Wm. Wood & Co. 1903.

TEXT-BOOK OF DISEASES OF THE EYE. For Students and Practitioners of Medicine. By Howard F. Hansell, A.M., M.D., Clinical Professor of Ophthalmology, Jefferson Medical College, and William M. Sweet, M.D., Demonstrator of Ophthalmology, Jefferson Medical College. With Chapters by Drs. Christian H. Holmes, Casey A. Wood and Wendell Reber. With 256 Illustrations, Including Colored Plates. Cloth. Pp. 532. Price, $4 net. Philadelphia: P. Blakiston's Son & Co. 1903.

AROMATICI E NERVINI. Nell'Alimentazione. I Condimenti, L'alcool (Vino, Birra, Liquori, Rosolli, ecc.); Il Caffè; Il Thè; Il Guarana; La Noce Di Kola, ecc. Sull'Uso Del Tabacco da Fuma e da Fiuto. By Dott. Adriano Valenti, Dell'Instituto Farmacologia Della R. Universita di Pavia. Cloth. Pp. 64. Milano: Ulrico Hoepli. 1904.

INTRODUCTION TO THE STUDY OF MALARIAL DISEASES. By Dr. Reinhold Ruge of the Imperial German Navy. Translated by P. Edgar, M.B., C.M. Edin., District Surgeon; Teluk Anson, F.M.S., and M. Eden Paul, M.D. Brux., M.R.C.S., L.R.C.P. Cloth. Pp. 137. Price, $2.75. London and New York: Rebman, Ltd. 1903.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE. Designed for the Use of Students. By James Magoffin French, M.D., Lecturer on the Theory and Practice of Medicine, Medical College of Ohio. Illustrated by 10 Full-page Plates and 50 Wood Engravings. Cloth. Pp. 780. Price, $4 net. New York: Wm. Wood & Co.: 1903.

THE PRACTICE OF OBSTETRICS. Designed for the Use of Students and Practitioners of Medicine. By J. Clifton Edgar, Professor of Obstetrics and Clinical Midwifery in Cornell University Medical College. With 1,221 Illustrations, Many in Colors. Cloth. Pp. 111. Price, $6. Philadelphia: P. Blakiston's Son & Co. 1903.

LA NEVRASTENIA. Con proemio del Prof. Clodomiro Bonfigli, Direttore del Manicomio di Roma. By Dott. Luigi Cappelletti, Vice-Direttore del Manicomio Provinciale di Ferrara. Milano: Ulrico Hoepli. 1904.

The Public Service.

Army Changes.

Movements of Officers of the Medical Department, U. S. Army, under orders from the Adjutant-General's Office, Washington, D. C., for the two weeks ending Saturday, Oct. 24, 1903:

Brown, Orville G., first lieut. and asst.-surgeon, is relieved from duty at Fort Monroe and directed to proceed to Washington, D. C., and report at the Army General Hospital, Washington Barracks, for assignment to duty until November 3, on which date he will be relieved, to enable him to report at the Army Medical School.

Crabtree, George H., first lieut. and asst.-surgeon, now at San Francisco, is relieved from further duty in the Division of the Philippines, and will proceed to Fort Columbus for duty.

Crampton, Louis W., lieut.-colonel and D. S. G., is granted leave of absence for thirteen days from about November 1.

Ewing, Charles R., major and surgeon, will proceed to Columbus Barracks for duty, relieving Major Guy L. Edie, surgeon. Major Edie will proceed to San Francisco and report for transportation to Manila, P. I., for assignment to duty.

Edie, Guy L., major and surgeon, is granted leave of absence for three months.

Gandy, Charles M., major, is granted leave of absence for one month.

Gilchrist, Harry L., first lieut. and asst.-surgeon, now on duty with maneuver division at West Point, Ky., will proceed to Fort Riley and report to Major-General John C. Bates for duty during the maneuvers in the vicinity of that post, and, on the conclusion of the maneuvers, will return to Fort Screven.

Gandy, Charles M., major and surgeon, now in San Francisco, is relieved from further duty in the Division of the Philippines, and will proceed to Fort Wayne for duty.

Harris, Jesse E., first lieut. and asst.-surgeon, is relieved from duty at Fort Myer, to take effect about November 20, and will report to the commanding officer of Second Cavalry for duty to accompany that regiment to Manila, P. I., for duty.

Hartsock, Frederick M., first lieut. and asst.-surgeon, will report to Lieut.-Col. Henry S. Kilbourne, D. S. G., president of the examining board at the Presidio, for examination for advancement.

Jones, John F., contract surgeon, is relieved from further duty at Fort Schuyler, and will proceed to Fort Totten for duty.

Lamson, Theodore, first lieut. and asst.-surgeon (recently appointed), will proceed from Auburndale, Mass., to Fort Myer for duty until November 3, on which date he will be relieved from duty at that station and will report at the Army Medical School for a course of instruction.

Ludington, Paul H., contract surgeon, is relieved from further duty at Omaha, and will proceed to Eagle Pass, Texas, for duty, relieving First Lieut. Park Howell.

Mansfield, Elmer R., contract surgeon, is granted an extension of leave to about November 20.

Murray, Alexander, first lieut. and asst.-surgeon, now in Washington, D. C., on leave of absence, will proceed to Fort Crook and report, not later than October 16, to the commanding officer Twenty-second Infantry for temporary duty, to accompany that regiment to Manila, P. I.

Niedman, William F. de, contract surgeon, is granted an extension of twenty days' leave.

Poihemus, Adrian S., major and surgeon, having reported his arrival at San Francisco, will proceed to Fort Crook for duty, relieving First Lieut. Charles E. Marrow, asst.-surgeon. Lieut. Marrow will proceed to Fort Sheridan for duty.

Rafferty, Ogden, major and surgeon, is relieved from duty as medical superintendent of the Army Transport Service at San Francisco, attending surgeon in that city, and will proceed to Fort Monroe for duty, to relieve Major Richard W. Johnson, surgeon. Major Johnson will proceed to Washington, D. C., and report to the surgeon-general of the Army for instructions and assignment to duty in connection with the Medical Department exhibit at the Louisiana Purchase Exposition. The chief surgeon, Department of California, will, in addition to his present duties, perform the duty of medical superintendent of the Army Transport Service in San Francisco.

Richardson, George H., first lieut. and asst.-surgeon, is granted leave of absence for one month and ten days. The resignation of the above has been accepted, to take effect Jan. 1, 1904.

Shepherd, John M., contract surgeon, is granted an extension of leave of absence for twenty-five days.

Shaw, Henry A., major and surgeon, is relieved from duty at the U. S. General Hospital, Washington Barracks, November 1, and will proceed to Fort Adams for duty.

Truby, Willard F., first lieut. and asst.-surgeon, is relieved from duty at Fort Ethan Allen, and will proceed to Fort Preble for duty, relieving Major Charles B. Ewing.

Watkins, Victor E., contract surgeon, is relieved from duty in the Department of the Colorado and will proceed from Fort Huachuca to Eagle Pass, Texas, for duty, to relieve First Lieut. Park Howell, asst.-surgeon.

The board of officers appointed by orders of May 4 to consider certain matters pertaining to the Hospital Corps of thee Army will, as early as practicable after the termination of the maneuvers at Fort Riley, reassemble at Fort Sam Houston to complete its work, under instructions to be communicated to it by the surgeon-general of the Army. Captains Francis A. Winter and Frederick P. Reynolds, asst.-surgeons, will, on the conclusion of the maneuvers

at Fort Riley, proceed to Fort Sam Houston for this purpose, and, on the completion of the work of the board, will return to their respective stations.

The following named assistant surgeons are relieved from duty at the posts designated, and will repair to Washington, D. C., and report, November 3, at the Army Medical Museum Building, to Col. Charles L. Heisman, A. S. G., president of the faculty of the Army Medical School, for a course of instruction at that school: First Lieuts. Henry S. Kiersted, Fort Miley; Jay R. Shook, Fort Myer; Henry E. Noble, Fort Sheridan; James W. Van Dusen, Columbus Barracks; Park Howell, Eagle Pass; Reuben B. Miller, San Francisco; James I. Mahon, Presidio; Percy L. Jones, Fort Redman; Fred W. Palmer, Jefferson Barracks; Edward B. Vedder, Fort Columbus; Henry F. Pipes, Fort Totten; Charles L. Foster, Fort Myer; John R. Besley, Fort McPherson; Robert C. Loving, Fort Leavenworth; Chester J. Stedman, Fort Adams; Orville G. Brown, Fort Monroe; George F. Jenkins, Fort Columbus; Joseph F. Siler, Fort McPherson; Arthur M. Whaley, Fort Sheridan.

Navy Changes.

Changes in the Medical Corps of the Navy for the week ending Oct. 24, 1903:

P. A. Surgeon B. L. Wright, commissioned a passed assistant surgeon from March 3, 1903.

Asst.-Surgeons F. M. Began, J. H. Payne, Jr., and J. J. Snyder, commissioned passed assistant surgeons from June 7, 1903.

Drs. J. Miller, Jr., E. C. Taylor, F. E. Campbell, J. E. Gill and I. S. K. Reeves, appointed assistant surgeons from Oct. 12, 1903.

Asst.-Surgeon J. W. Pugh, ordered to the Naval Museum of Hygiene and Medical Science, Washington, D. C.

Pharmacist J. Cowan, retired from active service, Oct. 19, 1903, under the provision of Section 1453, R. S.

Marine-Hospital Service.

Official list of the changes of station and duties of commissioned and non-commissioned officers of the Public Health and Marine-Hospital Service for the twenty-one days ended Oct. 22, 1903:

Surgeon Preston H. Ballhache, detailed to represent the service at the meeting of the American Public Health Association at Washington, D. C., October 26.

Surgeon D. A. Carmichael, granted leave of absence for thirty days from October 14.

Surgeon F. C. Kalloch, granted leave of absence for three days.

Surgeon J. H. White, to proceed to Gulf Quarantine Station and assume temporary charge.

Surgeon P. M. Carrington, granted two days' leave of absence from October 15, under paragraph 189 of the Regulations.

Surgeon G. M. Magruder, granted extension of leave of absence, on account of sickness, for two weeks from October 7.

P. A. Surgeon C. P. Wertenbaker, to proceed to Beaumont and Houston, Texas, for special temporary duty, October 2. To proceed to El Paso, Texas, for special temporary duty.

P. A. Surgeon J. C. Perry, to proceed to Charlestown, W. Va., for special temporary duty.

P. A. Surgeon B. C. Brown, granted leave of absence for one day, October 16.

P. A. Surgeon J. A. Nydegger, Bureau letter of September 4, granting him leave of absence for one month from September 13, amended so that said leave shall be for one month from September 23. Granted leave of absence for ten days, on account of sickness, from September 13.

P. A. Surgeon H. S. Mathewson, department letter of September 23, granting him leave of absence for forty-five days from September 23, amended so that said leave shall be for forty-five days from October 3.

P. A. Surgeon S. B. Grubbs, granted leave of absence for five days.

P. A. Surgeon L. L. Lumsden, to proceed to Beaumont, Texas, for special temporary duty, October 2. To proceed to Eagle Pass, Texas, for special temporary duty, October 3. To proceed to El Paso, Texas, and assume temporary charge of the station, October 13.

P. A. Surgeon J. F. Anderson, to proceed to Baltimore for special temporary duty, October 1.

P. A. Surgeon L. D. Fricks, granted leave of absence for one month from November 1.

Asst.-Surgeon T. F. Richardson, to proceed to San Antonio, Texas, for special temporary duty, October 21.

Asst.-Surgeon F. W. King, detailed as inspector of unserviceable property at Ponce, P. R.

Asst.-Surgeon Edward Francis, to proceed to the City of Mexico, Mexico, for special temporary duty, October 6.

Asst.-Surgeon L. P. E. Bahrenburg, granted leave of absence for seven days from October 14 under paragraph 191 of the Regulations. Granted extension of leave of absence for seven days from October 22.

A. A. Surgeon C. B. Ford, granted leave of absence for three days from October 24.

A. A. Surgeon B. W. Goldsborough, Department letter of September 10 granting him leave of absence for three weeks from September 10, amended so that said leave shall be for three weeks from September 22.

A. A. Surgeon J. M. Jackson, granted leave of absence for thirty days from October 5.

A. A. Surgeon H. C. Sibree, granted leave of absence for six days from October 6.

A. A. Surgeon J. G. Stanton, granted leave of absence for thirty days from October 10.

Pharmacist F. L. Brown, to proceed to St. Louis and report to medical officer in command for temporary duty, October 10.

Pharmacist F. S. Goodman, to proceed to Laredo, Texas, and report to Surgeon G. M. Guiteras for special temporary duty as special disbursing agent, October 2.

Pharmacist S. W. Richardson, Department letter of September 15, granting him leave of absence for ten days, revoked. To proceed to New York City and Providence, R. I., for special temporary duty, Octof r 14.

Pharmacist C. H. Woods, to rejoin station at Chicago, October 10.

Pharmacist M. R. Mason, relieved from duty at Nome, Alaska, and directed to proceed to San Francisco and report to medical officer in command for duty, October 8.

PROMOTION.

G. A. Morris, pharmacist of the third class, promoted to be pharmacist of the second class, effective September 3.

Charles Maples Steger, recommissioned as assistant surgeon in the Public Health and Marine-Hospital Service to correct original commission, effective September 16.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon-General, Public Health and Marine-Hospital Service, during the week ended Oct. 23, 1903:

SMALLPOX—UNITED STATES.

California: Los Angeles, Oct. 4-10, 1 case.
Colorado: Denver, Aug. 29-Sept. 26, 4 cases.
Florida: Jacksonville, Oct. 11-17, 1 case.
Illinois: Chicago, Oct. 11-17, 3 cases; Danville, Oct. 11-17, 1 case.
Louisiana: New Orleans, Oct. 11-17, 2 cases, imported.
Maryland: Baltimore, Oct. 11-17, 1 case.
Mississippi: Natchez, Oct. 12-19, 1 case.
Missouri: St. Louis, Oct. 3-10, 2 cases.
New Hampshire: Manchester, Oct. 11-17, 3 cases.
New Jersey: Camden, Oct. 11-17, 1 case.
Ohio: Cincinnati, Oct. 9-16, 2 cases; Cleveland, Oct. 11-17, 1 case.
Pennsylvania: Altoona, Oct. 11-17, 1 case; Johnstown, Oct. 11-17, 14 cases; Philadelphia, Oct. 11-17, 54 cases, 4 deaths; Pittsburg, Sept. 12-Oct. 17, 279 cases, 60 deaths, 7 cases imported.
South Carolina: Charleston, Oct. 11-17, 1 case, 1 death.
West Virginia: Jefferson County, Oct. 1-15, 14 cases; Wheeling, July 1-Sept. 30, 4 cases, 2 deaths.
Wisconsin: Milwaukee, Oct. 11-17, 9 cases.

SMALLPOX—INSULAR.

Philippine Islands: Cebu, Aug. 1-31, 8 cases, 4 deaths; Manila, Aug. 30-Sept. 12, 3 deaths.

SMALLPOX—FOREIGN.

Brazil: Pernambuco, Aug. 16-Sept. 15, 23 deaths; Rio de Janeiro, Sept. 14-27, 1,000 cases, 40 deaths.
Chile: Antofogasta, Aug. 23-31, 9 deaths.
Colombia: Barranquilla, Sept. 28-Oct. 4, 2 deaths.
Formosa: Aug. 1-31, 1 case.
Great Britain: Birmingham, Sept. 27-Oct. 3, 9 cases; Bristol, Sept. 27-Oct. 3, 1 case; Glasgow, Oct. 2-9, 1 case; Leeds, Oct. 4-10, 4 cases; Liverpool, Sept. 27-Oct. 3, 8 cases; London, Sept. 27-Oct. 3, 1 case; Manchester, Sept. 27-Oct. 3, 2 cases; Newcastle-on-Tyne, Sept. 27-Oct. 3, 5 cases, 1 death.
Malta: Sept. 20-26, 6 cases.
Mexico: City of Mexico, Sept. 28-Oct. 11, 5 cases, 4 deaths; Merida, Oct. 11, 1 case.
Russia: Odessa, Sept. 27-Oct. 3, 1 death; St. Petersburg, Sept. 20-26, 19 cases, 3 deaths; Warsaw, Aug. 28-Sept. 12, 7 deaths.
Spain: Barcelona, Sept. 27-Oct. 3, 4 deaths.
Turkey: Constantinople, Sept. 28-Oct. 4, 3 deaths; Smyrna, Sept. 28-Oct. 4, 77 deaths.
Venezuela: Yaritagua, Sept. 23, prevalent.

YELLOW FEVER—UNITED STATES.

Texas: Connell, Oct. 20, 1 case; Castroville, Oct. 21, 1 case; Hondo, Oct. 19, 1 case; Laredo, Oct. 14-21, 98 cases, 7 deaths; San Antonio, to Oct. 21, 15 cases, 3 deaths.

YELLOW FEVER—FOREIGN.

Brazil: Rio de Janeiro, Sept. 14-27, 5 cases, 3 deaths.
Mexico: City of Mexico, Sept. 28-Oct. 4, 1 case, 1 death; Merida, Oct. 4, 14 cases; Nuevo Laredo, Oct. 13-21, 14 cases, 2 deaths; Progreso, Oct. 4-11, 2 cases; Tampico, Sept. 30-Oct. 10, 6 deaths; Vera Cruz, Oct. 3-10, 38 cases, 11 deaths.
Venezuela: Puerto Cabello, Sept. 20-26, 1 death.

CHOLERA—INSULAR.

Philippine Islands: Manila, Aug. 30-Sept. 12, 94 cases, 76 deaths; provinces, Aug. 30-Sept. 12, 1,614 cases, 1,394 deaths.

CHOLERA—FOREIGN.

China: Hankow, Sept. 12-19, 1 case, 1 death; Hongkong, Sept. 5, 1 death; Shanghai, Oct. 12-19, 21 deaths; Tientsin, Sept. 12-19, 3 cases, 1 death.
India: Calcutta, Sept. 6-12, 4 deaths; Madras, Sept. 6-12, 3 deaths.
Straits Settlements: Singapore, Aug. 29-Sept. 5, 11 deaths.

PLAGUE—UNITED STATES.

California: San Francisco, Oct. 7, 1 case, 1 death.

PLAGUE—INSULAR.

Philippine Islands: Cebu, Aug. 19-Sept. 12, 6 cases, 3 deaths; Manila, Aug. 30-Sept. 12, 3 cases, 3 deaths.

PLAGUE—FOREIGN.

Brazil: Rio de Janeiro, Sept. 14-27, 62 cases, 24 deaths.
Chile: Iquique, Aug. 28-Sept. 11, 9 cases, 5 deaths.
China: Newchwang, Sept. 12-19, 73 cases, 62 deaths.
Egypt: Alexandria, Sept. 12-18, 8 cases, 4 deaths; Damietta, Sept. 12-19, 1 case, 1 death.
Formosa: June 1-Aug. 31, 164 cases, 142 deaths.
India: Calcutta, Sept. 6-12, 13 deaths.
Italy: Licata, Sept. 13-20, 1 case, 1 death.

In the report to the journals for September 19, 11 cases of smallpox were accredited to Ogden, Utah, when there should have been only 1.